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ABSTRACT

This report presents the findings of a survey ("Programs and Activities Using Technology To Serve Students at Risk of School Failure") of a sampling of large school districts in the United States and Canada, conducted to obtain information on the use of technology to serve students at risk of school failure for the participants in a conference on this topic. The first of four sections describes students at risk, i.e., who they are and the problems that they pose for society. Based on the comments and observations of the 360 survey respondents. The second section provides an overview of current programs and activities using technology, particularly computers and video. A summary of procedures, data analysis, and findings of the survey form the third section, and the fourth presents a selection of survey responses. These responses include 121 program descriptions, together with the names and addresses of people to contact, in seven areas: (1) basic skills instruction; (2) programs for dropouts and potential dropouts; (3) English as a second language; (4) instruction of multiple/various targets; (5) record keeping; (6) special education; and (7) vocational education. A copy of the questionnaire and the cover letter are appended. (MES)

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A Survey of the Use of Technology with Students at Risk of School Failure

Agency for Instructional Technology
Canadian Education Association
National School Boards Association,
Institute for the Transfer of
Technology to Education

IR013190

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Agency for Instructional Technology

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Canadian Education Association

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National School Boards Association, Institute for the Transfer of Technology to Education

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Foreword

Success in school, culminating in a high school diploma, has been identified as the single most important factor affecting personal, career, and life opportunities. Lifetime earnings, social and economic independence, citizenship, and self-satisfaction are all enhanced by school success.

Unacceptably high numbers of students in the United States and Canada, however, are "at risk"—of little or no achievement in school, failure to graduate, and social and economic unproductivity. Recently the Council of Chief State School Officers has adopted as a major goal the development and delivery of effective educational services to these students.

The Agency for Instructional Technology is currently celebrating a quarter century of service to education. While it is appropriate to take pride in the agency's twenty-five years of achievement in providing programming for students and their teachers, it is also fitting to re-examine priorities and determine the ways in which current technology can serve best where the need is greatest. There has long been a strong link between AIT and the Council of Chief State School Officers. Nearly half of AIT's Board of Directors is drawn from members of this group. It was natural, therefore, for the Agency to adopt as its own priority the one espoused by so many of its directors: the dedication of as many available instructional resources as possible to retrieve the future for those young people who are a potential loss to their schools and to society.

In keeping with this priority, AIT has organized a Conference on Technology and Students at Risk of School Failure. Its purpose is to provide an opportunity for those who shape education throughout the United States and Canada to identify ways that existing technology can improve the educational progress of these students. AIT's experience in enabling provinces and states to develop commonly needed programming based on technology makes such a conference particularly appropriate for the Agency.

Conference participants and all others interested in using technology to help these students need vital information to assist their thinking. This includes data on the current school uses of technology. Because the information is unavailable, AIT, in combination with the National School Boards Association's Institute for the Transfer of Technology to Education and the Canadian Education Association, recently surveyed a large sampling of school districts. Respondents described programs in place, or soon to be established, in which video, computer, and other technologies serve the education needs of students at risk.

This booklet reports the findings of this survey, "Programs and Activities Using Technology to Serve Students at Risk of School Failure." To provide context, its first section describes the students at risk—who they are and what problems they pose for society. The second section discusses the kinds of programs and activities revealed by the survey. Comments and observations of respondents form a large part of this material. An account of survey procedures together with a summary of its findings form the third section. The fourth section presents a selection of survey responses containing the actual descriptions of programs and activities in the words of the respondents, together with the names and addresses of people to contact. It is hoped that this section will be a useful resource guide for educators and others wanting to learn of those programs currently in place, or about to be established. The actual survey form and the cover letters that accompanied it are reprinted in the appendix.

The Student at Risk

The statistics shock us. Today, and every day, 40 teenage girls are giving birth to their **third** child. In some communities of the United States, infant mortality rates are higher than those of many third world nations. A higher percentage of American teenagers use drugs than in any other industrialized nation. Even though the number of total high school graduates in the United States has increased by 50% since the 1950s, only 52% of black students and only 40% of Hispanics complete high school at all.

Students are at risk in rapidly increasing numbers. They are at risk of failure in school and in the community, of economic nonproduction and self-destruction. All thoughtful members of society recognize that something must be done—as soon as possible—to reverse a trend that threatens to shred the fabric of our civilization.

Who are these students at risk, and how do we recognize them? A recent study by the Wisconsin Department of Public Instruction (*Children at Risk: A Resource and Planning Guide)* describes them as "children who are traditionally more difficult to instruct, who may demonstrate little or no interest in achieving in school, who are truant, and who too commonly leave school prior to graduation" (p. 1). A 1984 report by Kentucky Youth Advocates (KYA), Inc. (*Kentucky' s Children at Risk: The Inequities In Public Education)* calls them "children for whom expectations are low, regardless of individual potential. They are frequently unchallenged, ignored, 'tracked' out of the educational mainstream, and may ultimately be pushed out of school." This report estimated that such children "could total half of Kentucky's public school enrollment" (p. 6).

Most studies of students at risk find that they congregate heavily within certain, often overlapping, population groups. They come from families that are socially and economically disadvantaged or that belong to black, Hispanic, Native American, or other minorities. They may be handicapped, female, born out of wedlock, non-English speaking, neglected and abused, unemployed, or depressed and potentially suicidal. They are, or may soon become, low performers, school dropouts, young offenders, teenage parents, runaways, and drug and alcohol abusers.

While identification with one (and probably several) of these groups will greatly increase the probability of a child's being at risk, designation of particular students needing immediate help and intervention requires a more precise set of criteria. Several have been suggested. Students may need attention if they are

- one or more years behind grade level in reading or mathematics skills (K-8), or if they perform at very low stanine or percentile rankings on state or national skills or competency tests,
- three or more credits behind age/grade level in credits toward graduation (9-12),
- chronically truant,
- school age parents,
- adjudicated delinquents,
- experiencing personal and/or family alcohol or drug abuse,
- suffering family trauma such as death, divorce, violence, separation, or unemployment,
- victims of physical, sexual, or emotional abuse,
- limited in English proficiency,
- ethnically, economically, or culturally disadvantaged.

All agree that such children's problems take root in the arid soil of family breakdown and social neglect, and that ultimately the total resources of the community—social, public health, religious, business, and governmental, as well as educational—must be mobilized to overcome them. Nonetheless, there is much that can be done immediately within the school setting. While a school cannot stabilize a family, create jobs in a depressed economy, or prevent community violence, it can find ways to help children learn and progress in spite of all the conditions that seem to conspire against them. To do so may require innovation and imagination without precedence. In some instances, the entire structure of education may need to be challenged and redesigned.

David W. Hornbeck, addressing the Council of Chief State School Officers of which he is president, argued eloquently that "the education system must be restructured. . . we have largely fashioned a system that serves well those who are white, middle to upper income, well motivated and from relatively stable families. As students have deviated more and more from that norm the system has served them less and less well. We sometimes seem to say to them, 'We've provided the system. It's not our fault if you don't succeed.' Whether that attitude is right or wrong, the critical mass of at-risk children and youth has grown so large proportionately that we are in some danger of being toppled by our sense of rightness and righteousness. Instead of blaming the students for not fitting the system, we must design and implement a structure that provides appropriate educational services to those most at risk."

What are the consequences of inaction? One obvious result, described by Roger D. Semerad, Assistant Secretary of Labor for Employment and Training and a former vice president of the Brookings Institution, is that "the United States will permanently lose its place in the world economy" unless the number and level of the educated is greatly increased. He cites statistics from the Hudson Institute forecasting that nearly all new jobs will be in the "higher-skilled, high-paying occupations such as computer scientists, lawyers, and engineers." There will be a simultaneous decrease in blue-collar jobs.

Semerad argues that "the work force of the year 2000 will tolerate few, if any, people who are illiterate," yet in 1982 13% of adults over age 20 were illiterate, and another 2.3 million are added to this group each year. More alarming, 20% of young adults between 21 and 25 cannot read at or above an eighth-grade level.

Furthermore, Semerad says, many who will try to enter the work force of the future must be able to adapt to constantly changing demands. Workers must be "able to shift rapidly as foreign competition and technology wipe out some jobs while creating others....Workers may move five to six times in their work lives."

Education, according to Semerad, is the "key to averting a serious labor shortage in the year 2000." "It is quality education, beginning at preschool," he says, "that will ensure that the work force has the necessary literacy, analytical, and computational skills... [and] is proficient in problem-solving and interpersonal skills as well." David Hornbeck, citing the Report of the Carnegie Forum on Education and the Economy, succinctly states a similar point: "If we wish to maintain or improve our present standard of living, we must work smarter."

The economic consequences of ignoring the plight of students at risk can be measured, and they are frightening. Hornbeck and others have cited figures showing that by 1992 only three people will be working to support each retiree. In 1952 there were 17 workers. The Wisconsin study found that 75% of those in its state prisons are high school dropouts. A 1982 Michigan survey found that over 80% of those receiving Aid to Families with Dependent Children had failed to graduate from high school. In 1985, the United States spent $16.6 billion on families that were begun by teenage mothers. These people also must be supported by a shrinking work force.

There are disturbing social consequences as well. The unemployment rate of high school dropouts is four times higher than that of graduates, and likely to rise. Eighty percent of high school dropouts have problems with drug abuse. The U.S. Army Recruiting Command reports that dropouts fail to fulfill their military obligations at twice the rate as graduates. The armed forces are reluctant to accept dropouts for military service. Twelve out of every 100 children are born to unmarried parents. The rate of premature birth is increasing, and prematurity frequently leads to learning difficulties in school.

On the other hand, statistics show that every dollar spent helping students emerge from their bleak backgrounds into the forefront of educational progress pays rich social and economic dividends. The Wisconsin study states that "for every dollar it would cost to keep a child in school through graduation, society pays more than six dollars for maintenance of undereducated adults." *Barriers to Excellence: Our Children at Risk*, by the National Coalition of Advocates for Students, argues that offering Head Start to one half of the 2.5 million poor children eligible (up from the one-sixth eligible now enrolled) at an expenditure of $6 billion each year through the year 2015, would produce such a return that the program would become self-supporting. An additional $12 million savings in social service expenditures would also be generated. An investment in programs of compensatory education for blacks and other minorities would produce enough potential engineers, computer programmers, technicians, and health professionals to avoid any predicted labor shortage in the foreseeable future. Furthermore, the additional productivity of these new professionals should produce enough income, and enough taxes, to forestall any worrying about continued funding of Social Security.

We all know that these students must be helped—immediately. Even if we can tune out the arguments of social justice and fairness, we cannot ignore those of economics. The questions before us, then, are "What works?" "What will help?" It is hoped that this report will help answer these questions by focusing on technology and its role in improving the schooling of students at risk.

Overview of Current Uses of Technology

Technology has the unique ability to be nonjudgmental about a student's 'risk' factors.

Middle School Principal

Introduction

One of the fundamental ironies confronting us, when we examine how technology may serve the student at risk, is that the technological character of today's society is responsible, in large part, for putting students at risk in the first place. Pervasive technology has created a world in which the contribution of untrained muscle is virtually obsolete.

The same technology, however, which has created an economy so alien to many young people, can set them on the route to successful and productive lives. All too often these resources are least used where they are most needed. Here and there, however, imaginative and resourceful teachers and administrators have found ways to harness computer, television, video, telephone, and audio resources—products of the current revolution in communications—to an effort to reach students who have been resistant to traditional teaching.

This section, based on the recent survey "Programs and Activities Using Technology to Serve Students at Risk of School Failure," is an attempt to describe some of the programs in place and to relay some of the respondents' insightful comments.

What did the survey find?

Technology Uses: Activities and Comments

Computers

Roles

Instruction. Of the 360 forms that were returned, an overwhelming majority dealt with the use of computers for instructional purposes. Many were used in remedial math and reading programs, for skill reinforcement in a variety of classrooms, and for GED programs in which high school dropouts earned diplomas. The students who benefited included those in Chapter I programs, vocational students, those with limited proficiency in English, and a large number of special education groups. Head Start, preschool, and kindergarten teachers all reported effective uses of computer software for instruction.

The survey responses represent something of an evolution in teachers' appreciation of the contributions computers can make. Those whose use of software was most limited or most recent tended to regard this technology as a tool for repetitive drill and practice of skills taught by the teacher. Respondents in such situations did not express great enthusiasm about the results. A Chapter I reading coordinator was clearly expressing ambivalent views when she admitted that computers and software "can be greatly motivating to a child," but that she herself felt that "these students need the personal touch a person can give" and "on a one-to-one basis . . . the teacher is far more effective than electronic equipment." This teacher also charged that "appropriate software. . . is very limited at the present time."

In no way could this program have the desired outcome without a teacher who possesses knowledge of teaching skills and techniques and could be trained to guide the students as they use computer software to work through lessons in their needed areas of improvement.

Southern Respondent

Computer-assisted instruction, like many other uses of technology for which the respondents claim success, permitted individualization of instruction. Certain phrases recurred on a great many survey responses: "They work on a personally tailored academic program." "Several different components. . . utilize computers to meet the students' individual remediation needs." "Individualized programs are sent out. . . to meet children's remedial needs." "Teachers meet the individual needs of the students with sequential, developmental learning programs." "Word processing abilities of the students vary, of course, depending on age, literacy level, and experience with word processing. However, the teachers involved are accustomed to personalizing the instruction so that all students participate and make progress."

Many teachers praise word processing programs for the way in which they reinforce a variety of language arts skills and simultaneously motivate students and help them take pride in their work. Interestingly, some of the most enthusiastic comments about word processing programs came from teachers who were working with low-ability students and even some special education classes. One respondent reported, "The use of word processing software has greatly reduced the frustration of our lower-ability students in the preparation of neat copy and the ease with which they can edit their original drafts." A reading supervisor and assistant director of technology wrote about using word processing with low-scoring first and second graders: "Color printing of writing attempts is highly motivational." Another respondent wrote, "Because of the ease of using word processing, students tended to write more often and to do revisions more readily. Because of the quality of their work, students' self-esteem was raised and writing proficiency increased." A principal of a Continuation High School wrote, "The ease of editing and revision plus the appearance of the finished product are all motivating factors."

Respondents found that appropriate software actually increased students' reading abilities. A computer specialist and director of bilingual/bicultural education reported that when "software packages [are] measured against growth. . . *the software packages that appear to make the significant differences are those that deal with imaginative reading and decision making.*" The same respondent passed along a warning: "When you budget, be sure to include money for an ample supply of dictionaries and thesauruses. The amount of use they receive surpasses our wildest anticipation. The labs are given two copies of each at the beginning of the school year and these often must be replaced well before the end of the school year."

Such programs draw heavily on computers and video technology. Much of the computerized equipment and software is dedicated to specific vocational uses. An auto shop class at a continuation high school in California boasts "two and four gas analyzers and computer controlled oscilloscopes" to train students as auto emissions technicians. A teacher of industrial arts at an alternative school in New Jersey plans to introduce "computerized drafting equipment and programing of computerized robotic arms."

Students are introduced to computer software in a variety of fields such as retail sales, small business management, accounting, word processing, medical transcription, and graphics. In a program beginning next year in California, students will use computers to achieve "basic skills and career development on a continuum from small business awareness to entrepreneurship." Computers will be used to help students with basic skills, other courses (government), and business-related programs like business math, accounting, and computer literacy. They will also learn to use specific small business applications such as database and spreadsheets.

Diagnosis. Software has been combined with programs that "diagnose" a student's competencies and level of achievement, issue "prescriptions" for remediation, provide programs of instruction and drill, and monitor a student's progress. Most educators find that intensive use of such programs with low-ability or disaffected students and with potential and actual dropouts have been very effective in overcoming a variety of academic deficiencies.

Special Education. Other respondents reported that the multisensory, multimodality demands of the computer were highly effective with students in a variety of learning disability and special education classes. A guidance counselor in Massachusetts wrote, "Electronic technology. . . plays an integral role in a special education program because of its multisensory component that most special ed students need in order to achieve success."

Use of computers also enhances the self-esteem of these students. Many respondents reported that the opportunity to participate in a program using "high tech" effectively removed any stigma attached to remedial classes. A Canadian special education coordinator wrote, "A lot of students are frustrated with print, and a technological vehicle kindles their desire to learn."

> *If we underestimate the abilities of these students, denying them the challenge of critical and analytical thinking and writing, then we will get less from them than they are capable of doing.*
> New York Special Needs Coordinator

Teachers of children with various handicaps have turned to technology to help their students overcome a variety of obstacles. A teacher in Pennsylvania described introducing keyboarding to a third grader with cerebral palsy who was having difficulty writing. "The access to the computer. . .minimizes the student's handicap." At a junior high in Canada students with learning disabilities use lap-held computers for taking notes and doing assignments.

A director of a program in primary special education dealing especially with children with speech and hearing impairments wrote, "Using switches, communication boards, and adaptive devices along with computers and speech synthesizers, we are giving heretofore speechless children a 'voice' and a means to communicate." A center for physically disabled adolescents in British Columbia helps students use a variety of portable communication systems as well as a microcomputer with a voice synthesizer.

Record keeping. Computers are especially well-geared to record keeping chores, freeing time of teachers and administrators to deal directly with the students. A respondent in Missouri writes, "Paperwork is burying teachers and administrators in Special Education." He sends information about an electronic file room his district has established to record and preserve all relevant information about each student.

A district in Colorado has developed a computer system called EIPED (Early Identification of Potential Educational Discontinuers) "which will be capable of identifying students from grades K-12 who have a high likelihood of discontinuing school and tracking prevention intervention strategies implemented in the schools to address individual student needs." Seven characteristics—sex, ethnicity, family status, achievement, attendance, suspension, and mobility—are tracked and weighted on the basis of the "Fred Holmens Student Analysis System."

> *Paperwork is burying teachers. . .*
> Missouri respondent

In Florida, a school district's guidance program uses the Student Case Management System "to keep an ongoing record of some of the interventions and strategies used with

the students at risk." In addition, each secondary student has a computerized Career Course Plan (CCP) on file, and the TRACE (Transfer Student Information and Credit Evaluation System) program is also used.

A guidance counselor in Quebec described a project using a specially designed questionnaire with grades 8 and 10. Results are fed into a computer and the results help identify potential dropouts.

Software

One respondent complained about the lack of "good educational software." "We moved out of the drill-and-practice mode as soon as possible and into tutorial packages. The software market is constantly monitored and more creative packages used whenever they fit the outline of the grant."

Custom-designed systems. Some school systems have adopted extremely sophisticated technology combined with their own custom-designed software package to develop reading skills in Chapter I and other low-scoring students. A Texas city uses a program which includes word processing techniques with first and second graders: "Ufonic voice synthesis reinforces reading instruction. Word processing encourages application of learned vocabulary and fluency in composition. Integrated software package introduces a reading lesson and follows through with off-line workbooks and activity cards. The reading lesson is followed by on-line game reinforcement and skill testing with completely integrated management system. Word processing component contains 75 graphic selections which allows rebus writing for young learners. This enhances fluency and contributes to early writing attempts."

Like others, teachers of special education students complained that drill and practice programs were not enough. A coordinator of pupils with special needs in New York State said, "I would like to . . .work into a creative writing format on the computer, where most work is student-generated rather than teacher-generated. These types of students benefit from self-discovery and vicarious experiences which are fostered by creative thinking. If we underestimate the abilities of these students, denying them the challenge of critical and analytical thinking and writing, then we will get less from them than they are capable of doing."

Hardware Availability

Computer availability varied widely. Some schools reported a single minicomputer in one classroom, but many others described a "computer lab." A teacher from a Massachusetts school wrote, "There are twenty-four Apple IIGS computers available and those not in use in the lab are sent out to classrooms for more computer time for practicing or learning skills." An upstate New York respondent wrote, "Our current configuration consists of 9 Data General mainframes servicing 19 elementary schools. . . .Within our elementary schools, we maintain nineteen 32-terminal labs and two 16-terminal labs."

Impact

In the South, a study involving all reading students at a junior high school demonstrated a greater gain in achievement among those using computers in their reading classes compared with those who did not.

> *Many of our students find it easier to relate to machines than to people.*
> Principal, Continuation High School

Several respondents suggested reasons for the computer's success with chronic underachievers and students at risk. A newspaper reported about a program in a Florida city to help dropouts master basic academic skills. According to the article, the lab director

attributed the program's success to "positive reinforcement." "Students get the feedback from doing well at levels they are capable of attaining instead of being asked to perform beyond their ability." Programs are tailor-made to address specific problems each student is having in English, reading, or mathematics.

In addition to individualized programming and immediate feedback and reinforcement, respondents pointed to other, more subtle characteristics of computer technology that may make it particularly appropriate for use with students having social and academic difficulties. The director of a vocational center in Ohio said, "Computer-assisted instruction seems to be a preferred learning style for many students, especially low-level. Students use visual, auditory, and tactile-kinesthetic modalities to learn on computers." The principal of a Canadian high school described a "Learning Assistance Centre" in which computers are used to "teach alternate learning strategies."

A director of special projects reported that a computer lab was installed in a Southern high school to help low-functioning students "who need additional time and instruction in order to perform at a level necessary to pass a test of basic skills. . . .Evidence substantiates the fact that students who use the computer with appropriate mathematics software show significant gains in test scores." The respondent warned, however, as many others have, "The successful management of this program does require a skilled teacher who not only insures that students are working at the proper levels, but who can serve as a tutor to students experiencing difficulty. We felt that in no way could this program have the desired outcome without a teacher who possesses knowledge of teaching skills and techniques and could be trained to guide the students as they use computer software to work through lessons in their needed areas of improvement."

Video

Alaska's Video Network

Perhaps the most extensive use of video programming to support the curriculum occurs in Alaska, where one respondent from a district containing small, isolated villages reported, "Ninety percent of our 1250 students in grades K-12 meet one or more of the student at risk categories." The district maintains its own collection of ITV programs, and more are available through the State Film Library. Teaching guides are usually available with the series and are frequently requested. In addition, the state Department of Education has published a catalog of over 400 program offerings and an additional booklet called *Learning through Instructional Television*, which contains teaching tips, interviews with teachers who make extensive use of video, and suggestions for pre- and post-viewing activities.

Comments of Alaskan teachers quoted in the booklet suggest that many of the advantages of computer instruction also adhere to video. Television adds a visual and auditory dimension to a lesson that may be essential for a student with limited verbal abilities. According to the booklet, "Television transmits information even when the student's language skills are limited. Television can dissect, analyze, and demonstrate concepts and project them into various action scenarios. A single video scene can provide the equivalent of many pages of text. Information about an event can be shown to students as the event occurs. The background of persons involved in an event can also be examined. Many Alaska students are strong visual learners. Television provides a medium for increasing comprehension for these learners."

Other advantages of video instruction cited by the booklet include the promotion of a "more global perspective"; the introduction of new environments; an increase of motivation, interest, and involvement; the enhancement of abilities to analyze, evaluate, and think critically; the compression of time and distance; the immediacy of current and past events; the demonstration of cause and effect; the illustration of skills, functions, and relationships; and the presentation of microscopic and macroscopic images.

Elsewhere

A high school teacher of students who are learning disabled and who showed behavior and attitude problems discovered similar advantages to video reinforcement of the curriculum. From Massachusetts she wrote, "Curriculum in social studies and English is greatly enhanced by the use of a VCR in the classroom. Geography, cultures, time and space concepts are more easily perceived using the visual presentation. Concepts are more easily grasped. The language of books and short stories are given clearer meaning with the use of the VCR. It reinforces other learning."

Video is more commonly reported for use in guidance and counseling situations, for introduction and reinforcement of vocational skills, and occasionally to supplement instruction. A Maryland district uses videocassettes for teen pregnancy prevention, drug education, AIDS prevention, and for encouraging minorities to enter careers in science and engineering.

Districts with large numbers of students deficient in English language skills apparently are drawing on a variety of technological resources to help them. High schools in a Virginia city use VHS cassettes regularly, writes a respondent. A series called *Speak for Yourself*, she writes, "lends itself to student videotapes, and teachers use video cameras to introduce students to situations they are likely to encounter in their new environments."

A Texas school district has its own production studio transmitting through a cable network to all its elementary classrooms. Funded by Chapter I monies, two teachers produce lessons in basic skills. Two bilingual education programs are also produced. A district in California draws on ITV and videocassettes to "provide preview and/or background information in literature, social studies, science," and the respondent reports that these "*especially* help students with an ethnic, economic, or cultural disadvantage—or who possess limited proficiency in English."

Students at risk, whether or not they are in vocational programs, usually need extensive supportive counseling in areas ranging from study skills, money management, and job responsibilities to substance abuse, sex education, and parenting. In nearly all the programs reported, video programs play an important role. A Canadian respondent writes, "We utilize video cameras, VCRs, TV, cassette tape players, cameras, slides, and 16mm films to enhance the teaching/learning experience for our students. More specifically, these programs would relate to social skills development, understanding your own and others' thoughts and behavior, values clarification, family living skills, etc."

In Montgomery County, Maryland, where cable television programming has operated in the schools for years, several programs have been developed for the parents of at-risk students "to explain school policies and/or public law which relates to their children's success in school. For example, the school system has produced a program in five languages (English, Spanish, Chinese, Vietnamese, and Korean) about the effect of the new immigration law."

Computers and Video: Career Counseling

Computers and video programs are widely used for career counseling. Several respondents in the United States and Canada reported using "Choices" and "Career Search" software. Computers are used to help students assess their vocational choices and for resume preparation. Video programs dramatize interview techniques and introduce students to a variety of career possibilities. Mock interviews are videotaped.

Other Technologies

Several unusual and innovative programs make use of technology other than computers and video programming. A teleconferencing system has been established in Alaska to link isolated district schools with each other and with experts in a variety of fields. In Chicago, telephone dialers are used to "inform parents of absenteeism, cutting, and other attendance problems. Some systems are used to arouse students with a history of tardiness." "Homework Hotline" or "Dial a Teacher" programs have been established in several communities. Sometimes these are linked to televised help sessions.

Conclusion

Most teachers and administrators who responded to the survey praised the effects of the technology they were describing. The teacher who wrote, "The computer is *the most successful* teaching method I have used in 20 years of teaching!" is not atypical. Nonetheless, some respondents did express reservations. From Vermont an English teacher wrote, "This year not many have wanted to use the computer as an alternative tool. ('The screen is too big and others can see my mistakes,' said one hopeful user.) In the past I've had great success with student use. The best has been when students could work in my office area—on their own with privacy."

Many complaints dealt with the unavailability of certain kinds of software and its expense. A special education teacher in Minnesota stated, "We have stopped being interested in any company that requires buying software in order to preview it."

Respondents expressed reservations about drill-and-practice programs and wanted more that required problem-solving and critical thinking skills. A mathematics supervisor in Maryland said, "There is a definite need for software, both CAI and diagnostic, which adequately covers traditional middle school curriculum. . . .Little quality software on fractional skills, measurement, personal finance and graphing is available."

Although the percentage of returns to the AIT survey was small, some observations are nonetheless valid. None of the respondents described programs using technology that had been abandoned or given up. Nearly all complaints dealt with the expense and lack of availability of what those surveyed clearly wanted to increase. There is no way of telling from the survey how many programs dealing with students at risk do *not* use technology, but among those described, a variety of technologies contribute fundamental support. Perhaps the reason that technology is such a natural resource for dealing with students at risk was best stated by the middle school principal from Arizona who wrote, "The point should be made that the factors that put students 'at-risk' are frequently beyond their control. Technology has the unique ability to be nonjudgmental about a student's 'risk' factors. The technology will fulfill its potential only if the policies and programs dictating its use optimize contact and control by the students. This will allow the students an area in their lives where they are in control and successful. That will increase their self-esteem and in turn lessen the control of the 'risk' factors in their lives."

Procedures

The Agency for Instructional Technology (AIT), with the assistance of the Canadian Education Association and the National School Boards Association's Institute for the Transfer of Technology to Education, conducted a survey of schools in the United States and Canada to determine the uses of electronic technology in school programs or activities serving students at risk of school failure.

Respondents were instructed to consider students "at risk" as those who are

- *One or more years behind grade level in reading or mathematics skills (K-8)*
- *Three or more credits behind age/grade level in credits toward graduation (9-12)*
- *Chronic truants*
- *School age parents*
- *Adjudicated delinquents*
- *Victims of personal and/or family alcohol or drug abuse*
- *Victims of family trauma such as death, divorce, violence, separation, or unemployment*
- *Victims of physical, sexual, or emotional abuse*
- *Limited in English proficiency*
- *Victims of ethnic, economic, or cultural disadvantages*

"Electronic technology" was defined as

> *Instructional television, videocassette programs, computer software, or videodiscs which are used as teaching or learning resources, as programs for individualized instruction, or as learning motivators.*

This section describes the procedures for the survey and its findings.

AIT developed the survey to enable respondents to describe the at-risk groups that were being addressed and the type of program/activity that was developed for these groups. Since the survey was to be mailed, unsolicited, to a wide range of school systems, it purposely was kept as brief as possible. The survey was open-ended for two reasons. First, there was not enough information available about these kinds of programs to develop a more structured instrument. Second, and perhaps more important, it was felt that better descriptions of the programs might result if respondents were encouraged to answer in their own words.

The survey and a detailed letter of explanation were mailed to 2,046 U.S. school systems and 114 Canadian school systems. The materials were sent to each district's superintendent, with a request to distribute the survey to the appropriate person. Of this total, AIT mailed 1,946 surveys to a sample that was selected with the assistance of Quality Education Data (QED) of Denver, Colorado database. Surveys were sent to every school system in the United States with student populations of 25,000 and above, on the assumption that larger school systems might be more likely to have programs available that incorporated technology. No surveys were sent to school systems with less than 1,000 students, as systems were considered less likely to have programs that incorporated technology. For school systems between 1,000 and 25,000 students, surveys were sent to every fifth school system on the QED mailing list. Thus, this method saturated the largest school systems and sampled the smaller and intermediate systems.

The National School Boards Association mailed an additional 100 surveys to school systems from their mailing list and the Canadian Education Association mailed surveys to a total of 114 Canadian school systems.

Table 1 summarizes the returns.

Table 1

Source of mailing	# sent	# returned	% returned
AIT	1946	283	14.6%
National School Boards Association	100	2	2%
Canadian Education Association	114	75	65.8%
Total	2160	360	16.7%

As Table 1 illustrates, the percentage of returns was low. No attempt at follow-up phone calls was made due to the wide geographic spread of the sample and the uncertainty about exactly who to contact in various locations. Why was the percentage of returns so low? Perhaps the surveys did not get to the appropriate people in the school systems. Perhaps school personnel were too busy to respond. Or, perhaps the nonrespondents have no programs incorporating technology for at-risk students. Whatever the reasons, the low response rate is disappointing. Clearly, these returns do not reveal findings that are widely generalizable. The survey was not conducted, however, to generalize to the universe of school systems. Instead, its purpose was to determine some of the uses that are being made of electronic technology in school programs serving at risk students. As we shall see, even with the low response rate, the survey succeeded in describing a range of programs.

Analysis of Data

Since the surveys were intentionally open-ended, the data were somewhat difficult to analyze. First, a classification scheme was established for each item on the survey. Each survey was coded according to this scheme. Two evaluators worked jointly to code each survey. The codes were then checked by a third evaluator. It is important to note that the nature of the data required the evaluators to make judgments about many of the descriptions. Much of the data was divergent, and did not fit within the established codes. Therefore, many of the findings reported below contain a high percentage of "other" responses. Finally, when the coding was finished, the data were analyzed. The data lend themselves to descriptive statistics, which are described on the following pages.

Findings

Grade Level

Table 2 indicates the percentage of respondents who reported using technology at specific grade levels.

Table 2

Grade Level	Percent of Technology Uses by Grade Level U.S.	Canadian
Secondary	31%	31%
Elementary	24%	25%
Preschool	1%	3%
Secondary/elementary combined	15%	8%
Middle school/junior high	7%	11%
Junior/senior high school	8%	3%
Other/not specified	14%	18%

At-Risk Groups

Table 3 indicates the percentage of respondents who reported using technology with specific groups of at-risk students.

Table 3

Targeted Group	U.S.	Canadian
Adjudicated youth	2%	3%
Chapter I	20%	--
Special education	7%	45%
Dropouts	6%	13%
Below grade level in basic skills	17%	10%
Limited or non-English speaking	4%	--
No at-risk group specified	26%	13%
Other	17%	16%

Table 3 shows the divergent nature of much of the data. Almost half of the U.S. descriptions of technology uses could not be classified and/or were not specified. Almost half (44%) of the Canadian programs were targeted for special education students. In both countries, "special education" has a somewhat broad interpretation. Frequently a technology use described as designed for students two or more years behind in basic skills is assigned to a special education director or coordinator. Such an application might fall into different categories.

Number of Content Areas Addressed

One of the categories that emerged from the responses was the number of content areas that a technology use was designed to address. In several instances, a single use was designed to address multiple content areas for the same at-risk group. For example, one respondent described a single software program used to develop writing, "cognitive," and keyboarding skills, and to provide remedial instruction in English and math for Chapter I students.

Table 4 indicates the percentage of respondents who reported using technology to address a multiple, single, or unindicated number of content areas.

Table 4

Number of Content Areas	U.S.	Canadian
Multiple	36%	50%
Single	52%	33%
Not specified	12%	16%

Use of Technology by Content Areas

Table 5 indicates the percentage of respondents who reported using technology in specific content areas. The reader should keep in mind that categorizing the returns was a difficult task, particularly for this item.

Table 5

Content Area	U.S.	Canadian
Remedial math and/or reading	33%	2%
Occupational/career training	5%	8%
Record keeping	6%	3%
English as a second language	3%	--
Language arts	7%	7%
Skill reinforcement	14%	7%
Other	31%	73%

Nearly a third (33%) of the U.S. uses of technology focused on remedial math and/or reading. The majority of the Canadian uses (75%) did not fit within the established categories. Many of these were uses that addressed the basic needs of the special education students. For example, a use was described that incorporates portable communication systems such as VOIS 135, Light Talker, Touch Talker, and Epson Speech Pak to serve physically disabled students throughout British Columbia.

Language arts, skill reinforcement, and even English-as-a-second-language programs all frequently involve computer-assisted instruction and reinforcement in basic skill areas of reading, math, and writing. Together, such programs constitute 57% of all U.S. responses and 16% of Canadian responses.

Technology Used

Table 6 indicates the percentage of respondents who reported using a specific type of technology in their activities.

Table 6

Type	U.S.	Canadian
Computer	68%	81%
Video	8%	--
Multiple technologies	20%	16%
Not specified/other	4%	3%

When multiple technologies were employed, most were a combination of video and computers. Interestingly, no Canadian respondents reported using video-based programs alone. Overall, microcomputers are clearly the predominant technology used with students at risk in both the U.S. (62%) and Canada (81%).

Discussion

This survey attempted to discover the uses that are being made of technology in serving at-risk students. From the responses, the following findings have emerged.

1. The computer is the predominant technology being used by schools to serve students at risk in both the U.S. and Canada.

2. Technology uses were designed for a wide range of students, including adjudicated youth, non-English speakers, Chapter I students, and students who are behind grade level or deficient in math or reading.

3. Uses focused on a wide range of curriculum areas, including occupational/career training, remedial math or reading, English as a second language, record keeping, language arts, and skill reinforcement. Several technology applications also used computers for record keeping or tracking student progress.

Profiles of Selected Uses

Basic Skills

Dropouts

English as a Second Language

Multiple/Various Target

Record Keeping

Special Education

Vocational

Basic Skills

Academic Improvement for Middle School Students. (A.I.M.S.S.)

Target: Middle school students (grades 6, 7, 8) on end of the year retention list.

Description:

Students attend a four-week summer program using the computer as a tool to support math and reading skills as well as word processing to improve writing skills. In addition, traditional classroom instruction and group work is provided.

Status: Current

Contact: J. Sergent, Director, Computer Education
Chippewa Valley School District
19120 Cass Avenue
Mt. Clemens, MI 48044

Alternative Learning Program for Students (A.L.P.S.)

Target: High school dropouts, including those with behaviour and attendance problems and those who have extreme difficulty coping with a large secondary school environment.

Description:

Computer-assisted instruction has been used to motivate and assist in a diagnostic manner. Limited success was experienced due to the lack of availability of secondary school (grade 9-11) materials that have direct application to English courses of study. Limited and restricted role.

Status: Current

Contact: Peter F. Cassel, Superintendent of Special Education
The Lambton County Board of Education
200 Wellington Street, P.O. Box 2019
Sarnia, ON N74 7L2
Sarnia, ON N7T 7L2

Basic Skills

Autoskills Diagnostic and Prescriptive Reading Program

Target: At risk students in grades 3-6 on a pilot campus

Description:

Auto skills is an extensive software package that meets two important needs in education: The development of effective remedial programs for children with reading difficulties and secondly, to enhance the effective use of computers by teachers to reach well defined curriculum goals. The major theoretical principles integrated in the program include identifying, through testing, different subtypes of reading difficulties, and then remediating the deficits with programs specific to each type of difficulty. The program trains children to respond rapidly and automatically in reading letters, syllables, words and paragraphs. The software package is designed so that a teacher may work with several different students at one time

Status: Current

Contact: Dorys Dickey, Associate Superintendent
Judson Independent School District
P.O. Box 249
Converse, TX 78109

Basic Skills

Basic Literacy Skills

Target: Senior High School Students

Description:

Because examination of the responses of students who failed both the Baltimore City Public Schools Writing Proficiency Test and the Maryland State Department of Education Maryland Functional Writing Test has revealed that most students failed for two reasons (i.e., failure to respond to the exact demands of the assignment and failure to revise and edit their work), this program is designed to:

* improve students' ability to analyze a writing prompt in order to identify the necessary components for a successful response
* improve students' ability to compose in response to a writing prompt
* improve students' ability to revise their writing
* Improve students' ability to proofread their writing and to eliminate errors in the conventions of spelling, capitalization, punctuation, and the use of standard English

This need is consistent with the comments from employers and leaders in business and industry regarding the ability of students to respond to the demands of writing on the job.

Frederick Douglass and Southwestern Senior High Schools have been outfitted with 25 microcomputers and appropriate software for word processing. This equipment will be used throughout the program for all grade level students to compose, revise, and edit their writing.

The overall goal of this program is to improve the basic literacy skills of students who have already demonstrated their failure to master the skills necessary for success on a minimal competency test of functional writing skills. A corollary goal is to provide exposure to technology for students who heretofore have had little or no opportunity for such exposure.

Status: Current

Contact: Shelia B. Holley, Educational Specialist
Baltimore City School District
181 North Bend Road
Baltimore, MD 21229

Basic Skills

Chapter 1 Computer Assisted Instruction

Target: Chapter 1 students in three elementary schools and junior high students in four schools.

Description:

The Chapter 1 Program has three sites of CCC Computers in the elementary schools. Each site consist of eight terminals. Only students who are enrolled in the Chapter 1 Program have access to the computers. CCC Computers are CAI (Computer Assisted Instruction). Students receive instruction in mathematics and reading courses that are designed to individualize the supplementary program. Lessons are given at the student's academic level and are completed at the student's own pace. This computer assistance is designed strictly as drill and practice. We have visions of equipping all ten of our Chapter 1 schools with computers, not necessarily of this type, however. Junior High Chapter 1 schools of which there are four, use the CCC laboratories as well. Junior high schools have twenty-five terminals to a laboratory. Here, a great number of the students use the ungraded subjects because they are working above the elementary level.

Status: Current

√ Contact: Dr. Dolores Johns, Chapter 1 Administrator
Roanoke City School District
40 Douglass Avenue NW
Roanoke, VA 24012

Chapter 1, Education Consolidated Improvement Act (ECIA) Middle School Computer-Assisted Learning

Target: Sixth-, seventh-, eighth-grade students scoring one or more years below grade level in reading, mathematics, and language arts.

Description:

The program assists students who are performing below grade level in grades six through eight spending one-half hour daily at a DEC VT100 terminal connected to a DEC Micro II. The Micro II holds the Houghton Mifflin Dolphin Curricula for grades 1-8 in reading, mathematics, language arts and problem solving. Programs are individualized to meet the students' needs. The student starts at the grade level at which he is functioning and works upward at his own pace until he reaches his actual grade level.

The District's goal for these students is to pass the Minimal Competency Exams in reading, math, and language arts at the end of seventh grade. Remediation is given to those who did not pass one or more of the Minimal Competency Tests or whose academic records indicated that they would experience difficulty passing the tests. Four hundred students in seven buildings are enrolled on 48 terminals.

Status: Current

√ Contact: Jeanne A. Nelson, Director, Chapter 1 & Summer Programs
Peoria School District 150
3202 N. Wisconsin Avenue
Peoria, IL 61603

Basic Skills

Chapter 1 Non-public Schools

Target: Grades 2-12 scoring below 23rd percentile on Stanford Achievement Test.

Description:

Seven parochial schools are connected by modems to a host unit. Individualized programs are sent out to sites to meet children's remedial needs in reading/language/math. (Instructional Systems)

Status: Current

Contact: Dr. J. P. Rhinesmith, District Coordinator—Language Arts
New Britain School District
27 Hillside Place
New Britain, CT 06051

Chapter 1 Program at Nash Elementary School

Target: Approximately 110 Chaper 1 students, grades 1-6, in a low-income neighborhood school, functioning in the bottom quartile in reading/writing as identified by achievement tests and teacher referral. About 60% of the school population is highly mobile.

Description:

The Chapter 1 classroom now has two microcomputers (with printers) for a minimal program, but the teachers have applied for an Apple grant to add eight more computers and printers. The grant has passed the initial screening (as of March 1987).

Activities mostly involve the writing, editing, and publishing processes using such programs as AppleWorks, Newsroom, and Story Tree. Word processing abilities of the students vary, of course, depending on age, literacy level, and experience with word processing. However, the teachers involved are accustomed to personalizing the instruction so that all students participate and make progress.

Two and one-half Chapter 1 Reading specialists and a full-time instructional aide conduct the program in the Chaper 1 room in 30-45 min. daily sessions. The computers are a tool, rather than a program focus. The focus concerns using language, reading, and writing in functional and integrated ways related to real-life activites. The two microcomputers are in constant use now with students having to do a variety of activities before their scheduled time on the computer. With the anticipated addition of equipment, much more hands-on production time is projected.

Barbara D. Smith, Chaper 1 reading specialist, has been the impetus behind this program. Present monetary support for hardware, software, and staff training has been given by Chapter 1 with equipment maintenance provided by Amphitheater School District.

Status: Current, projected

Contact: Barbara D. Smith, Chaper 1 Reading Specialist
Amphitheater School District 10
Nash School, 515 W. Kelso
Tucson, AZ 85705

Basic Skills

Chapter 1 Reading Enrichment Program

Target: Chapter 1 students in four junior high schools and selected Chapter 1 elementary schools.

Description:

For two years, the Chapter 1 students have taken part in the CBS "Reading Enrichment Program". WDBJ-TV provides matched-to-broadcast scripts and teacher manuals to facilitate reading instruction.

Tailored to meet the needs of Chapter 1 educationally disadvantaged youth, teacher-made and student-made activities were created to supplement the CBS Television Reading Program production of "The George McKenna Story". A CBS gameboard was made to accommodate games that reinforce reading skills. The local newspaper supplied maps of the United States to be used in the research section of the project. These maps and the gameboard will be used again in future projects. Interviews with famous people were taped from television (both commerical TV and the PBS "Color Sounds" programs) to be used as discussion-beginners for the "Sharing and Caring" (SAC) section of the project. The SAC activities were designed by a junior high school guidance counselor. The interviews and SAC deal with positive solutions to teenage problems.

The School Resource Officer gave a presentation and the newly created "Addision Passport" was modified for Chaper 1 use.

Television was used to visually present the story and to present, as a discussion stimulus, the role models these young people admire and emulate. We hope to continue this highly motivating opportunity in the future.

Status: Current

Contact: Dr. Dolores Johns, Chapter 1 Administrator
Roanoke City School District
40 Douglass Avenue NW
Roanoke, VA 24012

Chapter 1 Reading Program

Target: Underprivileged children in grades 2-8.

Description:

We have a "pull out" program in the Chapter 1 Reading Program in which we use: 1. Hoffman Reader Program (sound filmstrip program) to enhance story comprehension, word meaning comprehension, and phonetic skills. 2. The Language Master (a "talking machine" with which students can practice sound-symbol relationships and/or vocabulary words. 3. Clues-a taped presentation with a student workbook--heavy emphasis on phonetic and word structure analysis. 4. Rainbow Spectra-Computerized Reading Game. Sharpen reading skills and speed.

We have written a grant proposal to get computers and related materials for each of our elementary schools and our middle school.

Status: Current

Contact: Grady L. Lewis, Director Federal Prgrams
Surry County School System
P.O. Box 364
Dobson, NC 27017

Basic Skills

Chapter I Reading

Target: Chapter I students in grades 4, 5, 6 who are reading one year or more below grade level.

Description:

One Apple IIe computer is used with the above mentioned students. Each student, working in groups of 2 or 3 has an assigned computer day each week. During this time, the students are involved with software which reviews and reinforces reading skills which were recently presented in instructional groups. It has proved to be a terrific motivator as well as an effective evaluation tool.

Status: Current

Contact: Christine O'Connor, Chapter I Reading Teacher
Southwick Public School System
94 Powder Mill Road
Powder Mill School
Southwick, MS 01077

Computer As a Tool to Support Skills Program (CATSS)

Target: Elementary students displaying difficulty with reading and math (Grades 2-5).

Description:

After school tutoring program in reading and math using Apple IIe and assorted math/reading software. Program includes evaluations, report to classroom teacher and parent report. Students work independently on computer and in small groups with teacher. Size is 18 students with 1 teacher and one student assistant.

Status: Current

✓ Contact: Joan Sergent, Director, Computer Education
Chippewa Valley School District
19120 Cass Avenue
Mt. Clemens, MI 48044

Basic Skills

Ecstatic Pencils

Target: Continuation High School Students (ages 16-19)

Description:

Under the direction of an English teacher, students solicit and edit an anthology featuring prose and poetry authored by students at all grade levels from schools throughout the district. Students used Apple IIe computers, and Apple Macintosh and a LaserWriter to produce a finished product. The graphics capabilities of the Macintosh and the "Job Shop" appearance of laser-printed copy have proven to be a highly motivating force.

Status: Current

Contact: Charles W. Norton, Principal
Montebello Unified School District
1230 South Vail Avenue
Montebello, CA 90640

English, Mathematics, Science, Social Studies--Mode 4

Target: Students in grades 7 and 8 who have not been successful in regular low ability classes (mode 3) but who do not qualify for any specials.

Description:

English: Commercially produced software packages are used for drill on punctuation, homonyms, synonyms, antonyms, spelling.
Word processing provides practice in writing complete sentences that can easily be corrected and for writing descriptive paragraphs.

Mathematics: Commercially produced software packages are used for drill on math facts.

Social Studies and Science: MECC Test Generator is used by students to review for unit tests; students review at their own pace or work together as a group.

Motivation: Simple games are used as a reward for students who have completed their work.

Intervention: Individualized computer assignments on specific skills aid the student who is behind or is lacking in a skill area.

Status: Current

Contact: Debbie Bohart, Mode 4 Teacher
Sycamore Community School District
Sycamore Junior High School
5757 Cooper Road
Cincinnati, OH 45242

Basic Skills

Fullana Computer Project

Target: Grades 5-6 low achieving students

Description:

Utilizing Apple IIe computers, students are given a minimum of 3 hours per week on computers working through a program on keyboarding, word processing, math drill and practice, spelling practice and other curriculum-related activites. Parents have also been trained on computers, and a traveling computer is checked out to parents.

Status: Current

✓ Contact: Judy S. MacDonald, Computer Curriculum Specialist
Poudre School District R-1
2407 LaPorte Avenue
Ft. Collins, CO 80521

Houston Independent School District reading software - integration into current Chaper 1 computer lab.

Target: Chapter 1 (students scoring 40 percentile and below in reading - grades 1-2.)

Description:

Use of Reading Software Package which includes word processing techniques developed by HISD. Ufonic voice synthesis reinforces reading instruction. Word processing encourages application of learned vocabulary and fluency in composition. Integrated software package introduces a reading lesson and follows through with off-line workbooks and activity cards. The reading lesson is followed by on-line game reinforcement and skill testing with completely integrated management system. Word Processing component contains 75 graphic selections with allows rebus writing for young learners. This enhances fluency and contributes to early writing attempts. Color printing of writing attempts is highly motivational.

Status: Projected

✓ Contact: Nancy Kimbrough/Carol Bertholf, Assistant Director Technology/Supervisor
Reading/Chapter 1 Bilingual
Brazoport Independent School District
Drawer Z
Freeport, TX 77541

Basic Skills

Kayenta Middle School Computer Lab

Target: We serve 470 6-8 graders, 96% of whom are Native American. Approximately 50% are somewhat limited in their use of English. They are mostly one year below grade level on the Iowa Test of Basic Skill (ITBS).

Description:

The KMS Computer lab is used by all students in grades 6-8. Our program is founded on the middle school concept of exploratory "electives". Students are exposed to keyboarding and BASIC programming; Logo will be added next year. We use an integrated software package (PFS: First Choice) to let the students gain experience with a word processor, spreadsheet, and data base. Our 24 Tandy 1000 student computers will be networked next year. We also have an authoring system that will be used to develop CAI/CMI courses in the topics covered in the computer lab.

Rather than comment on the specific future uses of electronic technology, the point should be made that the factors that put students "at-risk" are frequently beyond their control. Technology has the unique ability to be non-judgmental about a student's "risk" factors. The technology will fulfill its potential only if the policies and programs dictating its use optimize contact and control by the students. This will allow the students an area in their lives where they are in control and successful. That will increase their self esteem and in turn lessen the control of the "risk" factors in their lives. This is what we strive for here at Kayenta Middle School.

Status: Current

✓ Contact: Dr. Carolyn Stewart, Principal
Kayenta Unified School District 27
P.O. Box 337
Kayenta, AZ 86033`

Learning Assistance Centre

Target: Grades 10, 11, & 12 students.

Description:

Learning Assistance Centre - teach alternate learning strategies.

Apple IIe Computer & Printer used to teach learing strategies and print essays. Some of the programs used are Apple Works (word processing), and Word Attack (word identification & comprehension).

Status: Current

Contact: Jim Kerr, Principal, Carlton Comprehensive High School
665-28th Street East
Prince Albert, SK S6V6Y8

Basic Skills

Literacy Through Visual Media Program

Target: Students in grades nine through twelve who are one or more years below grade level in reading are served.

Description:

PROGRAM OBJECTIVES are:
-To motivate students who are not succeeding in the regular language arts program
-To provide opportunities for students to meet with and interview civic and community leaders
-To provide creative and challenging opportunities for students through interviews and other kinds of interaction with community leaders
-To provide opportunities to develop peer leadership techniques
-To train teachers and students to use media equipment and to develop media projects for use in CLA classes

PROGRAM DESCRIPTION:
Students in the visual media class work with students in the correlated language arts classes. They help the students with the filming after the CLA students have written and revised all scripts.

Students learn to use video equipment, to interview community leaders, to write scripts and to photograph their own city. They develop new insights about their own potential as well as an increased awareness of their community. Students do all written work to prepare for any filming.

Teachers work with community task force leaders to provide opportunities for students to meet with and interview community leaders.

STUDENT PROJECTS include:
-A campus television program that covers news, sports, fashions, school events, interviews with local or visiting leaders, and current teen problems
-Videos of interviews and dramatizations that cover such topics as the dropout problem, drugs and teenagers, and teenage pregnancy
-Videos of newcasts, dramatizations of events in Greek mythology, and other materials covered in the CLA classes

Status: Current

✓ Contact: Mary Howard , Director, Secondary Curriculum
San Antonio Independent School District
141 Lavaca St.
San Antonio , TX 78210

Basic Skills

Math Lab

Target: Remedial Math students

Description:

Currently, each building within the Brentwood Union Free School District contains a computer lab open to all classes. In addition, reading and mathematics labs are available in all buildings.

In the area of mathematics remediation, each facility is supplied with Commodore computers with a wide range of drill and remedial software. The remedial center is staffed with a teacher specialist as well as teacher assistants. The computer software is used to provide drill in specific areas of weakness as diagnosed by the specialist. In addition software provides tutorial programs as well as motivating factor from various graphics included within the programs. The effectiveness to date has been excellent.

Status: Current

Contact: Michael H. Fasullo, Coordinator of Secondary Planning
Brentwood Union Free School District
Third Avenue
Brentwood, NY 11717

Not specified

Target: *Limited English proficiency *Recent immigrant children *Economic disadvantaged *Migrant students

Description:

A 30 station, networked computer laboratory. The system uses Apple IIe and a 45 MB Corvus Omninet hard disk drive. It includes a backup tape memory and several (3) Imagewriter II printers.

The program options at this time include:

-2 Keyboarding programs (Jr. Typer and Touch Typer)
-A K-8 math sequence (various publishers)
-A 7-8 language arts sequence (various publishers)
-2 word processing programs (Write Choice and FrEd Writer)

The district has a master plan for educational technology. This plan has a plan for equitable access. This means that "at risk" students cannot be precluded from access to the lab for purposes of remediation or reinforcement

Status: Current

Contact: Sergio R. Robles, Coordinator, Educational Technology
Ocean View Elementary School District
2382 Etting Road
Oxnard, CA 93033

Basic Skills

Not specified

Target: Students scoring at or below 25th percentile on CAT reading/math subtests in grades 3-8

Description:

ECIA Chapter I is using computers in the remediation of eligible students. Students who qualify for service in reading and/or math have the opportunity to work with computer software appropriate to their needs as determined by a Personal Education Plan. Several different components of Chapter I in Granville County utilize computers to meet the students' individual remediation needs. In an after school program students have a computerized bank where they keep accounts for tickets earned for appropriate behavior and academic advancement. Each school has a word processor program to assist remedial students with composition and reading skills. Plans are under discussion to expand the use of computers with Chapter I students by establishing a software library - a centralized collection of appropriate software that can be loaned to Chapter I teachers on a rotating basis. Thereby, teachers have access to many programs rather than a few titles purchased for each school.

Status: Current and Projected

Contact: Denise B. Jennings, Chapter I Supervisor
Granville County School System
P.O. Box 927
Oxford, NC 27565

Not specified

Target: Middle School 6th - 8th grade

Description:

This year our school incorporated computers for the expressed purpose of remediating basic skills for our students who risk school failure. The machines were acquired through the Heartland Private Industry Council and the Computer Curriculum Coorporation.

Each course for remediation of language arts, reading, and mathematics includes a database and a set of motion algorithms.

The database is composed of all exercises that are potentially available for any student. The motion algorithms are the set of rules for selecting the next exercise based on student performance. In the lesson structures course, the database is organized by modules which are further subdivided into lessons. Each lesson focuses on one topic or skill and presents exercises in a progressive order. To individualize a lesson-structured course further, enrollment options offer flexibility that allows students to participate in lessons which they need and at the same time skip lessons which they have already mastered.

Status: Current

Contact: Steven White, Assistant Principal
School Board of De Soto County
420 East Gibson St.
P.O. Box 820
Arcadia, FL 33821

Basic Skills

Not specified

Target: Ninth grade (14 year old) Chapter I students at least two or more years behind in mathematics and reading skills.

Description:

1. Word processors are included in a program of writing skills improvement including revision of papers.

2. Computer lab activities are used to develop reading and mathematics skills - usually based upon individual need.

High interest materials and hands-on experiences are stressed in a program for 50 freshmen (ninth grade) students. Each class is taught by 2 instructors (English & math) and students are divided according to skill deficiencies. Motivational group and individual counseling are also included.

Status: Current and projected

Contact: Jeffrey Morse, Chapter I Director
Argo Community High School District 217
Argo Community High School
7329 West 63rd Street
Argo, IL 60501

Not specified

Target: "At-Risk" Summer School - 1986 and projected 1987 (Grades K-8)

Description:

1. Video

a. Movie tapes of literature read by the children were shown after the children had read the literature.

b. Tapes were made of students reading, doing puppet shows, and other verbal activities. They were shown back for immediate reinforcement.

2. Computer

Reading and mathematics programs were used for remedial purposes.

Status: Current

Contact: George Peternel, Principal, Mohawk School
Bensenville Elementary School District 2
917 W. Hillside
Bensenville, IL 60106

Basic Skills

Not specified

Target: Senior high students below grade level in math.

Description:

During the spring of 1987 a computer lab of IBM PCjrs was installed in one of Jackson's senior high schools where scores on tests of basic skills indicated a critical need for improvement. The computers in this learning lab are used as a resource with low-functioning students who need additional time and instruction in order to perform at a level necessary to pass a test of basic skills.

Evidence substantiates the fact that students who use the computer with appropriate mathematics software show significant gains in test scores. Installing this lab in a senior high school for the purpose of boosting students' skills in mathematics has provided a means of using computer technology as a vehicle in which to accomplish a task for which there was a proven need.

The IBM software that is presently used is such that a student can begin at his/her own particular level and progress at his/her own rate. The successful management of this program does require a skilled teacher who not only insures that students are working at the proper levels, but who can serve as a tutor to students experiencing difficulty. We felt that in no way could this program have the desired outcome without a teacher who possesses knowledge of teaching skills and techniques and could be trained to guide the students as they use computer software to work through lessons in their needed areas of improvement.

Status: Current

Contact: Brooke Woods, Director of Special Projects
Jackson School District
P.O. Box 2338
Jackson, MS 39205

Not specified

Target: 9-12 graders who are disadvantaged and below grade level in reading or math.

Description:

Performance based contract with Private Industry Council using Job Training Partnership Act (JTPA) funds. Students enrolled on system and pretested. Improvement of 1.5 grade level either/and math or reading results in completion and payment by P.I.C. System is in 8 high schools, using Computer Curriculum Corporation System. 88 Terminals linked to Microhost - Full time aide in each classroom.

Status: Current

Contact: Dr. John DeWitt, Director - Grants
Escambia County School District
30 E. Texar Drive
Pensacola, FL 32503

Basic Skills

Not specified

Target: Head Start/State Preschool children

Description:

Apple IIe computers were purchased by the Head Start program for use in the classroom in August, 1986. Head Start teachers and instructional aides, as well as parent volunteers, participated in training on the use and care of the computers.

The computers provide an early exposure to the low income families. They also provide a variety of opportunities to reinforce instructional language, develop oral language, follow directions and learn listening comprehension. The computer sofware purchased reinforces reading readiness and math skill areas such as categorizing, sequencing, letter and number discrimination.

The program will explore the use of upper grade students to extend the student/computer time.

Status: Current

Contact: Nancy Walsack, Project Manager
Jurupa Unified School District
3924 Riverview Drive
Riverside, CA 92509

Not specified

Target: Grade Level 9-12. Students who are: 1) Economically disadvantaged, 2) Limited English proficient, 3) Below grade level in achievement and/or credits earned toward graduation.

Description:

Special project funds are used to provide electronic technology for at risk students at district schools. Specifically, AB803 High Tech grants have provided computers and video recorders in math, English, science and social science classes. Special materials and software geared to low ability on limited English students is being used at all sites.

ECIA Chapter 2 grants have supplemented regular district funds to add computer labs at 4 of 7 campuses. Several periods each day are devoted exlusively to programs for identified Chaper 1 ESL students.

AB551 staff development grants have provided extensive staff inservice on software to promote the education of low risk students.

Individual classroom teachers have written and received CTIIP grants to introduce electronic technology into their various curricula. Examples include: Introduction to Computers, Tapmaster/Pitchmaster software in music, computerized drafting equipment and films for special education classes.

Status: Current

Contact: Jim Book, Coordinator, Special Projects
Fullerton Union High School District
780 Beechwood
Fullerton, CA 92635

Basic Skills

Not specified

Target: Low functioning junior high students.

Description:

Jackson Public Schools is presently using computer technology to sharpen reading skills at one of the Junior High Schools in the district where students have previously been identified as being low-functioning. To determine if the students' use of the computer would have an effect on their learning, a study was done during the 1985-86 school year whereby the students in the reading classes were divided into two groups, computer and noncomputer. The students in the computer group spent two class periods per week in computer related activities using software designed by Wasatch Education Systems, while the noncomputer classes worked on the same concepts but without the assistance of the computer. The courseware includes areas of inference, ambiguous language, figurative language, main idea/detail, and writing.

In a typical classroom setting wherein students are using computers to enhance their learning, teachers serve as the decision-makers and managers for their classes; the computer assists by providing guided practice. So that students will be engaged in appropriate learning activities while they are at the computers, the teacher must decide what curricular items are to be addressed. The computer then keeps track of the students' work. Using the computer as a manager of instruction serves a two-fold purpose: 1) for the student it allows for immediate feedback, and 2) for the teacher it provides an on-going record of the students' performance.

During the course of the study all reading students completed the California Achievement Test, Level 16, as a pretest in September and as a posttest in December. The students who were using the computers for reinforcement in their reading classes showed a greater gain in achievement than those who were not using computers.

In responding to questionnaires regarding the use of computers in reading, both teachers and students alike gave the program a good rating. A large majority (86%) of the students said that using a computer in their reading classes made their work much more enjoyable and 81% of these students indicated that using the computer made them eager to come to class every day.

Recent research has shown that in order to meet the needs of students with differing learning styles, alternate teaching methods must be used. Many times low-functioning students will respond quite positively to an alternative delivery system such as the one used in this reading program. In short, technology does have its place in the classroom when it is used as a supporting means of helping students to achieve.

Status: Current

Contact: Brooke Woods, Director of Special Projects
Jackson School District
P.O. Box 2338
Jackson, MS 39205

Basic Skills

Not specified

Target: Academic Occupational Programming:
Year I-14 as of Sept.1. Year II-15 as of Sept. 1. Year III -16 as of Sept. 1

Description:

This programming is to provide an alternative to help students who have serious difficult in keeping up with their peers in regular school courses and to provide special classes designed to prepare students for direct entry into occupations.

Computers are used in providing drill and practice in the basic skills in Mathematics and Language Arts. Micro-computer-based career counselling programs are also used. Computer software is also being investigated as to use in development and management of Individual Education Plans for each student.

Status: Current

Contact: G. S. Schick, Director, Special Services
Sturgeon School Division No. 24
9820 - 104 Street
Morinville, AB T0G 1P0

Not Specified

Target: High School students who exhibit chronic truancy and have failed courses during the previous semester. Students in grades 1-8 who are one or more years behind in reading and mathematics, and may be of limited English proficiency

Description:

Usnisys/Autoskills uses the Icon, a computer specifically designed for use in the classroom, to deliver a remedial reading program by identifying, through testing, different subtypes of reading difficulties, and remediating the deficits with procedures specific to each type of difficulty. The premise is, that when oral reading skills, auditory-visual matching skills and visual matching skills become automatic, as measured by a level of rapid response time, a reader's full attention can be given to comprehension and true reading is more easily attained. Levels of accurancy and speed of response are automatically recorded and at any time the test history, training history and profile analysis can be called up and displayed in tables and graphs.

Status: Current

Contact: Irwin Kaufman, Director
New York City Public School District
131 Livingston Street, Room 200
Brooklyn, NY 11201

Basic Skills

Not specified

Target: Students in grades 1-6 who are one or more years behind in reading and mathematics, and may be of limited English proficiency.

Description:

The WICAT Education System provides individually paced, managed, computer assisted instruction in the basic skills to students via networked system. Students' reading abilities are diagnosed according to 22 different disabilities including dyslexia. Prescriptions are generated to meet the specific needs of each student. Analyses of student performance are produced based on the success and failure of the prescribed learning objectives. Software in the subject areas is available for grades K-12 and is run on the management system described above. The evaluative instrument is correlated with the WICAT curricula, and both are correlated with popular textbooks and the New York State PEP tests. There is extensive use of graphics, animation and high quality audio in the programs.

Status: Current

✓ Contact: Irwin Kaufman, Director
New York City Public School District
131 Livingston Street, Room 200
Brooklyn, NY 11201

PALS (Principal of the Alphabet Literacy System)

Target: Grades 8-12— Multiple failures and nonreaders.

Description:

The PALS Lab is located at John Glenn High School and serves 98-100 "at risk" students who read below the 5th grade level. The program is a twenty (20) week course using IBM personal computers, the new IBM info-window (incorporating interactive video) and typewriters. In the twenty (20) week period, using this system, expectations are that students will gain three (3) grade levels in reading. The program is in its first operational period, so results are not yet available.

Status: Current

✓ Contact: Ms. Linda Hary, Assistant Principal
Norwalk LA Mirada Unified School District
John Glenn High School
13520 Shoemaker Avenue
Norwalk, CA 90650

Basic Skills

Peer Coaching in Writing

Target: High School

Description:

Students doing well in writing are trained in word processing and tutoring and then help students who are having difficulty with the prewriting, writing and editing process.

Status: Current

Contact: Judy S. MacDonald, Computer Curriculum Specialist
Poudre School District R-1
2407 LaPorte Avenue
Ft. Collins, CO 80521

Prescription Learning Lab

Target: Chapter I kindergarten through eighth grade, ages 6-13.

Description:

Remediation of children in grades K-8 who are deficient in reading and math. Students are assigned to a computer 20 minutes per day, five days per week, for tutoring and drill and practice (Prescription Learning Lab). Students working with Computer Curriculum equipment spend 10 minutes per day, five days per week, with tutoring and drill and practice.

Status: Current

Contact: Ira T. Neal, Director of Federal Projects
Evansville Vanderburgh District
1 S.E. Ninth Street
Evansville, IN 47708

Basic Skills

Project Skills Training for Achievement in Reading (STAR)

Target: Chapter 1, Grades 4-6; 33rd percentile or below on standardized reading tests.

Description:

Project STAR provides successful learning experiences through step-by-step instruction, active pupils responses, immediate feedback and self-pacing lessons in individualized student prescriptions. Each STAR Learning Center uses an individualized, self-pacing audio approach to remedial reading instruction, with emphasis on reading comprehension, vocabulary, and study skills.

Status: Current

Contact: James Penning, Acting Director, Compensatory Education
Cleveland City School District
1380 East Sixth Street
Cleveland, OH 44114

Reading

Target: Seventh grade students

Description:

Currently all remedial reading classes use the computer daily. We have a definite schedule with names on the chalkboard when students enter the room. Each child has a form for recording scores when finished with assignments. I have found the Sunburst materials appear to be consistent with current researchin reading. I have found M_ss_ng L_nks to be a superior piece of software for it gives nine difficulty levels with answers based on built-in knowledge of word structure and spelling, grammar, context clues, and even literary style. In addition we also use Word-A-Mation, (Sunburst) Word Attack, and Applewriter on a very unsophisticated level.

I schedule the students for the computer lab as often as possible. (Never more than once a week.) During this time the students work on reinforcement of vocaburlary and spelling lessons. I formulate definitions for both of the former. Our computer teacher programs the lessons, and the students take quizzes on materials used the day after being in the lab. (Scores of the classes who have not been to the lab never are as high as those who have had the extra reinforcement.) The vocabulary is usually germane to the novel we are studying or the words are content area words.

I use filmstrips and videos very sparingly in my reading classroom. (One is used with the newspaper unit and one for the novel-INCREDIBLE JOURNEY.) Current research in reading indicates most students are not READING enough in the reading classrooms. (Too many other activities are replacing the main emphasis and therefore, I try to limit the amount of time spent on vdeo and filmstrip situations.)

Status: Current

Contact: Mrs. Jan M. Battistini, Reading Teacher
Sycamore Community School District
Sycamore Junior High School
5757 Cooper Road
Cincinnati, OH 45242

Basic Skills

Reading Lab

Target: Remedial reading and writing—all grades.

Description:

Each school building within the Brentwood Union Free School District contains a "Reading Laboratory." The reading labs were designed to provide remediation in the areas of reading and writing for those students identified by our testing remedial and word processing software. The reading specialist uses the software for drill and motivational purposes. In particular, the use of word processing software has greatly reduced the frustration of our lower ability students in the preparation of neat copy and the ease with which they can edit their original drafts. Additional computer equipment is available for classroom use.

Status: Current

Contact: Michael H. Fasullo, Coordinator of Secondary Planning
Brentwood Union Free School District
Third Avenue
Brentwood, NY 11717

Reading Strategy

Target: Chaper 1, Grades 4-6; 33rd percentile or below

Description:

This project assists upper elementary pupils in the mastery of basic reading skills. Supportive teachers, working with small groups within the classroom, implement and extend the skill instruction initiated by the classroom teachers. Programmed instruction reading centers operate in selected schools, using such things as audio visual viewmasters.

Status: Current

Contact: James Penning, Acting Director, Compensatory Education
Cleveland City School District
1380 East Sixth Street
Cleveland, OH 44114

Basic Skills

Secondary Learning Centre-Work Experience

Target: Ages 15-18; slow learners; achievement discrepancy of at least two grades; includes work experience.

Description:

Computer, video, ITV:

Motivational. A lot of students are frustrated with print, and a technological vehicle kindles their desire to learn.

Status: Projected

Contact: Gary Allan Turner, M. ED , Coordinator of Special Education
District 48 Howe Sound
Box 250
Squamish , BC V0N 3G0

Skills Improvement Program (S.I.P.)

Target: Pupils in grades 7 and 8 with deficiencies identified in English and reading.

Description:

Students receive intensive instruction in reading, writing, and mathematics. Students' school days are extended one and one-half hour each weekday. Students also are encouraged to attend a Saturday, one-half day session during which time there are opportunities to use a computer lab, produce videotapes and prepare presentations related to these activities.

Status: Current

Contact: Mr. Domenic Bona , Coordinator of S.I.P.
Rochester City School District
Monroe High School - 164 Alexander Street
Rochester , NY 14607

Basic Skills

Special Education Resource Room

Target: K-12 students officially admitted to resource room setting based upon academic or emotional needs.

Description:

Microcomputer software programs are selected to meet the needs of a student's individual educational plan. A variety of programs are used to enhance the student's chances of academic success with the skills necessary for high school graduation.

Status: Current

Contact: Thomas D. Munroe, Research, Planning and Technical Service
Highland Park Independent School District
7015 Westchester Drive
Dallas, TX 75205

SRA Study Skills Program

Target: Students reading below grade level in grades 6-8.

Description:

The program teaches reading skills such as main idea, sequencing, and comparison through a study skills format emphasizing organization, outlining, reference search, and other study skills formats. The program is being expanded to two other intermediate campuses next year. The software is tutorial and helps students see the application of reading skills in subject area content, such as social studies, science, and literature.

Status: Current

Contact: Carol Bertholf, Supervisor Reading/Chapter I/Bilingual
Brazosport Independent School District
Drawer Z
Freeport, TX 77541

Basic Skills

State Compensatory Education Program for Mathematics

Target: The State Compensatory Education Program serves students in grades 6-10 who have been identified as being 5 months or more below the norm on the California Achievement Test.

Description:

The State Compensatory Education program is designed to supplement the regular instructional program through the use of alternative teaching strategies, varied materials, and additional instructional personnel. Among the supplementary procedures used at the middle school level (grades 6-8) is computer assisted instruction. Students receive an average of one period a week of CAI. The selection of skills for practice is based on students' needs to reinforce skills currently being studied and/or students' needs for review and maintenance of old skill areas in which the individual student has a demonstrated deficit.

The projection for the next year is for increased use of the computer as a diagnostic/prescriptive tool for indivdual student deficit areas. The degree to which the computer will be used as a diagnostic tool depends heavily on the availability of appropriate software that adequately matches middle school curriculum.

There is a definite need for software, both CAI and diagnostic, which adequately covers traditional middle school curriculum. At present, the available software generally covers whole-number computational skills.

Little quality software on fractional skills, measurement, personal finance, and graphing is available.

Status: Current

Contact: Alice Morgan-Brown, Supervisor of Mathematics
Baltimore City School District
181 North Bend Road
Baltimore, MD 21229

Basic Skills

Summer School

Target: Elementary and middle school students

Description:

Students identified for this program have demonstrated that their math and reading skills are significantly below grade level. Students participating in the program receive intensive math and reading instruction (approx. 2 hours per day) for a six week period during the months of June and July.

Students participating in the program spend part of their time using various computer software applications as part of their instruction. The software used is of a drill and practice format.

This program, and others like it, would benefit from the development of interactive video with computer software applications. Use of such applications within an individualized program such as this, would allow instructors to 1) develop more flexible curriculums for students, and 2) better manage the program and provide school personnel with a detailed report of each student's gains while participating in the program and areas still needing to be addressed.

Status: Current

Contact: James J. O'Brien, Jr., Computer Education Coordinator
Perry Township Metropolitan School District
c/o Southport High School
971 E. Banta Road
Indianapolis, IN 46227

Summer Youth Program/Kent County Learning Lab/Remediation Program

Target: Economically eligible in-school students between the ages of 14-17.

Description:

The Summer Youth Program's overall objective is to remediate potential high school dropouts who are academically deficient. They are remediated in math, reading & language arts using the Comprehensive Competencies Individualized Computer-Assisted Program. By using this individualized education plan, the students will be able to increase their basic skills one to three grade levels in approximately 150 hours of instruction and return to school in the fall.

Electronic Technology used to achieve these goals is the Apple IIe Computers (used with CCP Instructional Disks) and Project Direct Computer instruction through Department of Public instruction.

Our second program will start June 1987 in Smyrna High School for this same purpose.

Status: Current

Contact: Sandra Keller, Program Coordinator
Kent County Vo-Tech School District
205 Carroll's Plaza
Dover, DE 19901

Basic Skills

TEAMS Remediation

Target: Students who did not show mastery of exit level TEAMS tests in grades 11-12.

Description:

Students are required to take this course if they have not shown mastery of TEAMS tests. The teacher has identified materials used for remediation. These include filmstrips, worksheets, and computer-assisted instructional materials in one-on-one situations to remediate as needed.

Status: Current

Contact: Shirley D. Ray, Curriculum Director
Calallen Independent School District
4205 Wildcat
Corpus Christi, TX 74810

TELLS Math Program

Target: This group consists of sixth grade boys working two years below grade level in math.

Description:

We teach a daily math class to 13 sixth grade boys who are functioning at a fourth grade level. This class is being taught in a "non-traditional" manner using manipulative activities and the computer. Computer activities include using drill and practice software for needed work with basic skills, problem-solving computer activities for the entire class such as "The Factory" produced by Sunburst, exploring geometry through the computer language Logo, and redeveloping basic concepts using tutorial software. The program also includes the use of four function calculators for estimating and problem solving.

Status: Current

Contact: Linda P. Bonawitz, Director of TELLS Math Program
Stroudsburg Area School District
123 Linden Street
Stroudsburg, PA 18360

Basic Skills

Use of Computers in Corrective Reading Classes.

Target: One or more years behind grade level in reading skills, grades 4-8.

Description:

An Apple IIe is used as a component in our corrective reading program. Many books that our students use in the program have related software programs which provide practice in vocabulary development, comprehension skills, and study skills. As a follow-up to the reading of the book, each student is given the opportunity to work with the computer. The computer program provides immediate feedback to answers and is highly motivational for this group of students.

Status: Current

Contact: Karen Widmer, Interim Language Arts Coordinator
Stroudsburg Area School District
1100 West Main Street
Stroudsburg, PA 18360

Using Computers to Improve Reading Skills

Target: Chapter I Reading - One or more years behind in reading grade level.

Description:

In fifth grade, we are using prescriptions from the Prescription Learning Lab in our school to correlate with instruction in Chapter I reading class. These prescriptions have been prioritized individually according to deficiencies noted on the pre-*TEAMS test in vocabulary and comprehension skills. (* a state-mandated test)

In first through fourth grades, we use several sets of software for motivation, as well as instruction. These sets have entertaining formats and graphics for letter sounds, rhyming, and comprehension skills. Vocabulary words from basal readers are presented in hidden work and crossword puzzles.

Status: Current

Contact: Karen Clemons, Chapter I Coordinator and Teacher
Belton Independent School District
Miller Heights Elementary
P.O. Box 148
Belton, TX 76513

Dropouts

Academic Bloc (7th Grade Core)

Target: Seventh Grade; 12-14 years of age (approximately 20 students).

Description:

We are in our second year of the Academic Bloc Program. This is a program developed by one of our teachers and designed to work with students in the areas of English, math, reading, and science who display some of the characteristics of school dropouts! Betty Alexander instructs these 15-20 students in a three-period block of time. She also works with them on study skills.

She has often used the video recorder in her classroom. I have written a grant under AB 803 to incorporate computers into this curriculum. Since the dropout problem is so real, we are optimistic that the proposal will be funded, and we will have $7,500 to spend on hardware and software to supplement the curriculum as well as motivate the students!

Status: Current and Projected

Contact: Gloria Watts, Administrator
Fresno Unified School District
Curriculum & Instructional Servies
Tulare & M Streets
Fresno, CA 93721

Assisted Study

Target: Dropouts 17 or under. Dual-enrolled in day high school and assisted study (have lost credits toward high school graduation).

Description:

Computer-Assisted Management Program developed by C.A.I. in Salt Lake City, Utah. Apple IIe's used to contain competencies, lists of instructional materials, test items, etc. Students are tested on competencies by using the computer. It scores their tests. Grade and credit based solely on test scores. Competencies and test items are being standardized state-wide by adult programs but are also used in our district for younger "at risk" youth. Next year's effort will be to add instructional videocassettes, videodiscs, and computer software to help students prepare for tests. This year we created 108 teacher-made booklets to help students prepare to take tests.

Status: Current and Projected

Contact: Dr. Susan Stone, Director Community & Adult Education
Alpine School District
50 North Center
American Fork, UT 84003

Dropouts

Baltimore City Mathematics Program

Target: Grades 6-12

Description:

At present, no systemwide course-offering, or application of computers to the classroom, exists for mathematics for "at risk" students. Where hardware is available, computers are used to provide CAI, computer applications and computer programming. "At risk" students are incidentally involved in such programs.

There are a few cooperative effects between other agencies (public and private) which are aimed specifically towards "at risk" students. The Project SAIL (Student Achievement in Learning) is such a program. It was designed to give potential dropouts a work-study experience during the summer and a tutoring service during the winter. The tutorial portion is strongly computer-assisted instruction oriented. This project currently functions in three high schools.

Budgetary constraints have prohibited the development of specific programs for "at risk" students at the secondary level.

There are several needs in the area of electronic technology which would benefit the total population but would be especially beneficial to "at risk" students: (1) more sophisticated CAI software which more closely matches traditional middle and high school curriculum; (2) more simulation software which would not only provide better reinforcement of skills, but encourage critical thinking; and (3) affordable networking systems.

Status: Current

Contact: Alice Morgan-Brown, Supervisor of Mathematics
Baltimore City School District
181 North Bend Road
Baltimore, MD 21229

Cable Television

Target: Ethnic; economically, or culturally disadvantaged.

Description:

Montgomery County Public Schools produces over 500 original programs each year for distribution over a local cable access channel operated by the system as well as distribution on VHS cassettes. The district has produced several series which are used as motivators for the "At-Risk" Group. The programs include BLACK HORIZONS, a series of four programs that demonstrate and reinforce positive black role models. A second series of five programs, HISTORICAL PROFILES OF BLACKS IN MONTGOMERY COUNTY, provides perspectives of the role of blacks in the economic, social, and political history of the local communities.

Status: Current

Contact: Mr. Harry Swope, Television Program Specialist, Television Services
Montgomery County School District
850 Hungerford Drive
Rockville, MD 20850

Dropouts

Division of Interagency and Alternative Programs

Target: Adolescents ages 13 to 18 not able to be maintained in school due to chronic truancy, seriously disruptive behavior, and problems induced by drug/alcohol abuse. Some are adolescents referred by the juvenile justice systems.

Description:

Educational services for students in grades 9 to 12 in 10 off-site residential and day programs. Instruction follows the Montgomery County Public Schools Program of Studies and curriculum guides in order that students earn proper credit toward high school graduation. In addition, basic skills are taught in math, reading, language arts, social studies, and science.

The most important aspect of the program is the active involvement of students in situations that require application of learning. A multimedia and experimental approach is used throughout the instructional program. Films, videotapes, slides, and computer software is utilized by all programs to reinforce skills and concepts. Visual and computer literacy skills are presented as thematic units. Each program has access to projectors, videocassette recorders, and an Apple IIe computer.

Status: Current

Contact: Charles E. D'Aiutolo, Supervisor
Montgomery County School District
850 Hungerford Drive, Room 232, CESC
Rockville, MD 20850

Dropouts

Junior High School Student Assistance Program - Los Angeles Unified School District

Target: Junior High School Students; Ages 12-16 years; Grades 6, 7, 8, 9.

Description:

I. JUNIOR HIGH SCHOOL STUDENT ASSISTANCE PROGRAM

A. Nine Regional Centers— An individualized program of academic instruction and academic, adjustment, and/or attendance problems have prevented them from successful achievement in the regular school program. Each Center has 15-18 students, one teacher, and one adult teaching assistant. Students are placed in the Center on a temporary basis. The goal of the program is to have the students resolve their problems and return successfully to a regular school program. Computer software programs are used to provide individualized instruction, intensive academic remediation, and drill in all academic subject areas. Each student spends approximately 10% of the school day using a computer. (More computers are being purchased and the goal is to enable these students to have access to a computer for 25% of their school day.) Videocassette programs are used regularly in the Centers for motivational, instructional and counseling purposes. Approximately 10% of the students' school day is alloted for the viewing of videocassette programs which emphasize vocational information, career awareness, student counseling/guidance. Instructional television is used as a teaching or learning resource in all academic subject areas. The programs provide learning motivators and are viewed by students approximately 10% of the school day.

B. Extended Counseling/Guidance— Each junior high school is provided with 8 hours of additional counseling/ guidance time each week in order to assist students with academic, adjustment, and/or attendance problems. Counselors at each junior high school work directly with students and their parents before or after school, in the evenings, and on weekends. Videocassettes are used regularly by the counselors when working with high-risk students and their parents. Videocassettes on topics such as Self Esteem, Dropping Out, Behavior, Peer Pressure, Gangs, and Drugs are utilized as a means of facilitating and generating discussion in both students and parent groups. Also, videocassettes are a source of information to parents and frequently assist counselors in motivating students to develop more positive behaviors, attitudes, etc., towards school.

Status: Current

Contact: Sally Fujii, Junior High School Student Assistance Program
Los Angeles Unified School District
Dropout Prevention/Recovery Office
450 N. Grand Avenue, Room H-221
Los Angeles, CA 90012

Dropouts

Not specified

Target: Young people, grades 6-12, at risk for early sexual activity, drug use. Students who generally do not enter careers in science and engineering.

Description:

The following video cassettes are used in secondary schools:

Title	Topic
"Looking for Love"	Teen Pregnancy Prevention
"It Only Takes Once"	Teen Pregnancy Prevention
"The AIDS Movie"	AIDS Education
"Steps to Follow"	Encouraging minorities to enter careers in science & engineering

Status: Current

Contact: Andrea Bowden, Supervisor, Office of Science & Health
Baltimore City School District
181 North Bend Road
Baltimore, MD 21229

Out of School Youth - OSY Program

Target: Approximately 30 to 40 students between the ages of 15 to 17 who are not currently enrolled in a Rialto Unified School District program. Referrals come from the Child Welfare and Attendance Coordinator.

Description:

The objective is to provide students with a unique program in which they will be encouraged to return to either the comprehensive or continuation high school.

A student is required to attend 4 out of 5 days from 1:00 - 4:00 p.m. each afternoon, and complete an hour of homework each day. While in school the student spends approximately 1-1/2 hours with a teacher and 1-1/2 hours in our Controlled Data Computer Lab. Class time, computer time, and homework are all interrelated. Counselor time is readily available. Parent support is encouraged.

Status: Current

Contact: Charlene DeBranch, Principal, Milor High School
Rialto Unified School District
266 W. Randall Avenue
Rialto, CA 92376-6999

Dropouts

Program Alternative for Student Success (P.A.S.S.)

Target: Students in grades 9-12—Ages 16-21; High school dropouts (current/past); Students who are repeating 9th grade.

Description:

Program Alternative for Student Success serves those students who are "at risk" of leaving school before they graduate. The program features increased time and practice on the basic skill, increased structure to improve time management, closer identity with teachers to improve adult-child relationships and closer supervision to improve accountability. PASS operates in three of the city's high schools and in one of those schools, a computer in a science classroom is made available to PASS students. In another, the software package "Classics Old and New" is routinely used in the instruction of reading. The third school expects to begin using the computer in reading instruction this year.

Status: Current

Contact: Dr. Thomas B. Lockamy, Director of Instruction
Norfolk School District
800 E. City Hall Avenue
Norfolk, VA 23510

Project BARN (Body Awareness Resource Network)

Target: Grades 7-12; Alcohol and/or Drug Abuse

Description:

Students in all high schools and some elementary schools utilize the Body Awareness Resource Network (BARN) developed by Encyclopedia Britanica and delivered microcomputers to gain individualized insights into substance abuse, stress, body care, and smoking.

Status: Current

Contact: Ted T. Gradolf, Director, Bureau of Computer Education
Chicago Public School District 299
1819 W. Pershing Road, 5W(n)
Chicago, IL 60609

Dropouts

REACH Program and Alternative Education Center

Target: Young people between the ages of 16 and 19 who are residents of the Rialto Unified School District and who have not attended an educational program for the preceeding 45 school days.

Description:

REACH is a dropout recovery program initiated by the Rialto Unified School District which is designed to "reach" into the community to locate dropouts and motivate them to return to the school system. REACH involves students, parents and the community.

An Alternative Work Center has been establish on the campus of Dr. John H. Milor High School. Students enrolling at the center will be assessed to determine both academic and vocational needs. An Independent Study Plan will then be developed.

The program is individualized so that students work at their own pace within a flexible schedule designed to meet their needs. Classroom computers or the Controlled Data Computer Lab on the Milor High School campus may be utilized. Their progress is closely monitored throughout enrollment to help insure success.

Status: Current

Contact: Charlene DeBranch, Principal, Milor High School
Rialto Unified School District
266 W. Randall Avenue
Rialto, CA 92376-6999

Rebate

Target: 100 Targeted potential dropouts at each secondary school.

Description:

Utilizing the Potential Dropout Profile, each secondary school has targeted 100 potential dropouts for intensive services determined by each school. A rebate of $50 per student is given for each student who remains in school until the end of the school year and demonstrates improvement in other criteria, e.g. attendance, academic grades, and behavior. Each school determines its own services and some are videocassette and computer learning motivators.

Status: Current and Projected

Contact: Dr. George Koonce, Jr., Director, Department of Dropout Prevention
Dade County School District
1450 N. E. Second Avenue, Room 733
Miami, FL 33132

Dropouts

Student Attendance

Target: Truants/Dropouts (9-12)

Description:

Telephone dialers are used to inform parents of absenteeism, cutting, and other attendance problems. Some systems are used to arouse students with a history of tardiness.

Status: Current

Contact: Ted T. Gradolf, Director, Bureau of Computer Education
Chicago Public School District 299
1819 W. Pershing Road 5W(n)
Chicago, IL 60609

Student Support Services

Target: We deal with all of the "At-Risk" groups described in the memo from Robert Blair dated March 6, 1987; grades 9-13.

Description:

Student Support Services is primarily a counselling-based program (both individual and group), but also has a social skills, extracurricular, and recreational component to it. We utilize video cameras, VCR's, TV, cassette tape players, cameras, slides and 16 mm films to enhance the teaching/learning experience for our students. More specifically, these programs would relate to social skills development, understanding yours and others thoughts and behavior, values clarification, family living skills, etc.

Status: Current

Contact: Sharon Stratford, B.Ed., M.A., Supervisor/Senior Counsellor
George Harvey Collegiate Institute
City of York School Board, 1700 Keele Street
Toronto, ON M6S 1V6

English as a Second Language

Early Intervention Pilot Project

Target: Hispanic first grade students scoring at or below the 50th percentile in reading and/or mathematics.

Description:

This project provides an intensive language arts and math program to a group of approximately 30 Hispanic first graders. The focus of the language arts program is a whole language approach with integrates reading, mathematics, writing, speaking and listening activities. Oral language development will be stressed. The focus of the math component will be on manipulative approaches to develop mathematical concepts. Computers are used as a tool to support instruction in both language and math. The use of the computer also aids the students in the development of skills required to work independently.

Status: Current

Contact: Janice Sherril, Instuctional Computing Resource Teacher
Rochester City School District
131 W. Broad Street
Rochester, NY 14614

Educational Systems Technology Corporation Reading and Math CMI

Target: Low achievers in grades 1-4.

Description:

This project uses computer-managed instruction in reading and math to supplement classroom curriculum. Designed to run on Tandy 1000 with sound, the program offers the students 30 minutes on prescribed materials. The students served are from one of our district's lower-achieving schools with a higher percentage of Hispanic students.

Status: Current

Contact: Judy S. MacDonald, Computer Curriculum Specialist
Poudre School District R-1
2407 LaPorte Avenue
Ft. Collins, CO 80521

English as a Second Language

English as a Second Language

Target: English as a Second Language Grades K-12.

Description:

The ESL program in Roanoke City covers grades K-12. K-6 ESL students are serviced by an itinerant teacher. Two high school teachers teach ESL 3 hours daily. Our secondary programs uses VHS regularly, primarily with a series called Speak for Yourself. This series leads itself to student videotapes, and teachers use videocameras to introduce students to situations they are likely to encounter in their new environments. Computers are not used in the class, but some students take separate computer courses.

Status: Current

Contact: Nancy Ruth Patterson, Director
Roanoke City School District
107 Church Avenue
Roanoke, VA 24011

Harmony ESL software and Educational technology primary voiced software along with Bilingual Steps to comprehension.

Target: Elementary ESL and Bilingual students enrolled in Chapter 1.

Description:

Computers with Ufonic voice synthesizers used to give audio and visual instruction to primary ESL Bilingual learners. Software is used as reinforcement following ESL or Bilingual instruction. Harmony is correlated with ESL off-line materials. Educational technology and primary steps software is used to reinforce skills in district reading scope and sequence.

Status: Current

Contact: Carol Bertholf, Supervisor Reading/Chapter1/Bilingual
Brazosport Independent School District
Drawer Z
Freeport, TX 77541

English as a Second Language

High School English as a Second Language

Target: Limited English Proficient students grades 9-10.

Description:

Students who require intensive English language training will be offered 1-3 periods of ESL daily. Part of that time will be spent in a language lab where either IBM or Apple Computers will be used. Vocabulary, grammar, and written composition will be emphasized in the software program. Some voice software equipment may be available. The teacher for the program has used word processing and grammar software with her ESL class this year and indicates a favorable response by the students.

Status: Projected

Contact: Vicki Halliday, Coordinator for Special Programs
Plano Independent School District
1517 Avenue H
Plano, TX 75074

Instructional Television

Target: Major focus on elementary (K-6) grades, ages 5-12.

Description:

Laredo Independent School District has its own production studio that transmits daily through cable network to all elementary classrooms. It is co-funded through local, state, and federal monies. Through Chaper 1 Regular monies, ITV employs two certified teachers who plan, write, and produce lessons in reading and mathematics, focusing on the needs of LISD's disadvantaged students as identified through CAT and TEAMS (the state's test on minimal skills). Also produced are two bilingual ed programs, "Picadillo" and "Tony's Corner"; these focus on the needs of our "English deficient" students.

An expansion of the facility is projected to include gifted and talented disadvantaged students.

Status: Current

Contact: Graciela C. Ramirez., ,Director of Federal Programs
Laredo Independent School District
1618 Houston
Laredo, TX 78040

English as a Second Language

Not specified

Target: LEP Students

Description:

Students in the K-6 programs have opportunities in their bilingual classrooms to use software in their primary language and also to improve their English skills. Several schools use voice synthesizers to assist in the acquisition of English. While these programs are only in their beginning stages, they promise to be a successful method of providing additional English instruction.

Status: Current

Contact: Nancy Walsack, Project Manager
Jurupa Unified School District
3924 Riverview Drive
Riverside, CA 92509

Pre Kindergarten ESL

Target: Limited English Students who will be in kindergarten or 1st grade in September.

Description:

This is an eight week summer program designed to increase the English language skills of limited English proficient students who will be in kindergarten or 1st grade in the fall. Students attend for 4 hours daily. Part of the intense English language instruction will be the IBM Writing to Read lab. Students with some oral language will spend 1 hour daily in the lab. Teachers for the program have been trained and are currently using the IBM lab with their kindergarten students.

Status: Current

Contact: Vicki Halliday, Coordinator for Special Programs
Plano Independent School District
1517 Avenue H
Plano, TX 75074

Multiple/Various Targets

Assertive Discipline

Target: Training of teachers in grades K-12.

Description:

Video tapes are used in conjunction with a school level trainer to train teachers in elementary, middle/junior, and senior high schools in Assertive Discipline classroom management/discipline techniques. The objective of the video program is to provide the skills and confidence necessary for teachers to take charge of classroom behavioral problems, thereby creating a positive learning environment.

Status: Current

Contact: Mrs. Gwendolyn Jennings Kidney, Executive Director
Dade County School District
1450 N.E. 2nd Avenue
Miami, FL 33132

Cable Television

Target: Students with drug, alcohol, adjustment, and emotional problems.

Description:

The Montgomery County Public Schools' cable television service is committed to providing programs in all subject areas that will aid teachers, parents, and community members in helping children succeed in school. One specific series, FOR PARENTS ONLY, is produced in cooperation with the Montgomery County Council of Parent Teachers Associations and deals with topics of critical importance to the success of the at-risk group. The cable television service provides an opportunity for parents to be involved actively in the production and dissemination of information critical to those adults who must deal with children who have problems. Programs are videotaped and are available on VHS cassette.

Status: Current

Contact: Mr. Harry Swope, Television Program Specialist, Television Services
Montgomery County School District
850 Hungerford Drive
Rockville, MD 20850

Multiple/Various Targets

Continuation Education

Target: High school students who are at least 16 years of age and are irregular attenders, achieving below capability, insubordinate, disorderly, and/or have demonstrated poor adjustment and are not successful in the regular school program.

Description:

Continuation Education is a program of completely individualized instruction and extensive counseling designed to serve those high school students whose needs are not met in the regular school program. A continuation school provides a small campus setting and low student-teacher ratio. Contracts and other methods of instruction allow students to begin a course at any time, to proceed at their own pace, and to receive credit upon completion of coursework. Students who have a history of failure are provided with an opportunity for success which reinforces positive self concept.

The role of electronic technology in Continuation Education: 38 basic math lessons on computer have been developed for use by students in their individualized instruction program. Lessons in other subject areas will be developed. An electronic resource center (central data base) has been set up and through telecommunications, continuation schools can access all current contract coursework materials on disk at the electronic resource center. Videocassette programs are used for instructional and counseling purposes. Instructional television is used as a learning resource.

Status: Current

Contact: Dan Doane, Project Director
Los Angeles Unified School District
Amelia Earhart High School
5355 Colfax Avenue
North Hollywood, CA 91601

Dial A Teacher

Target: All interested students.

Description:

While this program is not specifically designed for "at-risk" students, it is one group that the program is intended to help. This program is one in which students may call (between 5 and 8) teachers who are manning phones and are supplied with all textbooks being used, for help with homework problems. The program is designed to reduce the anxiety created by homework assignments where no help is available.

Status: Current

Contact: Pat Lee, Director, Telecommunications
Kanawha County School District
200 Elizabeth Street
Charleston, WV 25311

Multiple/Various Targets

Homework Hotline

Target: Junior and Senior High Students (grades 7-12) - Math and English.

Description:

Our "Homework Hotline" show was designed to help students with their math homework. This year English was added with plans to add other subjects in the future. Students call in with questions on their homework or to get review help for tests, etc. Teachers help students over the telephone or live on television if they have our television station. When doing a problem on TV, the teacher works it out with the student live while they interact over the telephone and their television. We have been able to help many students with this program. The telephone lines are open Monday-Thursday from 5:00 to 8:00 p.m., and on television Monday and Wednesday from 5:00 to 6:00 p.m.

Status: Current

Contact: Hope Mitchell, Director of Educational Television
Mesa Unified School District 4
549 N. Stapley Drive
Mesa, AZ 85203

Instructional Television Programming

Target: 7-12

Description:

Kanawha County Schools belongs to a local area consortium which buys & produces instructional TV which fits the needs of Appalachian youth.

Status: Current

Contact: Pat Lee, Director, Telecommunications
Kanawha County School District
200 Elizabeth Street
Charleston, WV 25311

Multiple/Various Targets

Media Services

Target: 90% of our 1250 students in grades K-12 meet one or more of the student at risk catagories listed on the cover letter. (See Appendix.)

Description:

The Bering Strait School District Media Center provides curriculum support materials to the 15 village schools in the district. The Media Center has its own collection of the more popular ITV programs which are also available through the Office of Instructional Services and the Alaska State Film Library. These programs cover a wide variety of curriculum related topics and are heavily requested by teachers throughout the district. Teaching guides are also available and requested for many of the ITV programs for which rights have been purchased as well as numerous Alaskan produced programs.

In the fall of 1986, the Alaska Department of Education, Office of Instructional Servies provided each school with a catalog of program offerings as well as a 14 page booklet called LEARNING THROUGH INSTRUCTIONAL TELEVISION. Many of our teachers and students have benefited from the examples in this booklet as well as the teaching tips and extended activities suggested in the program teaching guides. Over 400 programs are offered. Many programs listed under the topics of Adult Basic Education, Counseling and Guidance, Learning/Study Skills, and Vocational/Career Education are used with "students at risk". These programs provide students with invaluable visual experiences unavailable in our remote, rural villages.

A popular and effective ITV activity is the series of Talkback programs sponsored by the Alaska Department of Education. Talkback is a live, interactive program which allows students to call in questions and talk with other students and experts on a preselected topic. Support material is sent to each school prior to the program. This year's topics relate to health/students-at-risk issues including Alcohol and Drug Abuse, Adolescent Stress/Suicide Prevention, and Adolescent Sexuality. Many students in our district participated in this program.

This year our district participated in the state wide Battle Of The Books reading incentive program. Many of the "behind grade level in reading" students read and answered questions on books in inter-school, inter-district and inter-state battles using the Learn Alaska Audioconferencing system.

We anticipate continuing these same services and activities for "students at risk" during the 1987/88 school year.

Status: Current and Projected

Contact: Roz Goodman, Media Specialist
Bering Strait School District
Box 225
Unalakleet, AK 99684

Multiple/Various Targets

Not specified

Target: *Limited English Proficiency
*Recent Immigrant Children
*Economic Disadvantaged
*Migrant Students

Description:

Participant in OPIE (Oxnard Programming for Instructional Excellence) which is a collaborative effort (consortium) of several local districts for the purpose of establishing video tape resources. These resources include a tape library, a central clearinghouse and technicians. These technicians can tape special events and transmit them or educational programs through closed circuit.

Status: Current

Contact: Sergio R. Robles, Coordinator, Educational Technology
Ocean View Elementary School District
2382 Etting Road
Oxnard, CA 93033

Not specified

Target: Adjudicated Delinquent; Ages 14-21.

Description:

Computer lab set up in Juvenile Detention Center to serve students. Four terminals which tie into District's Micro Host Computer Curriculum Corporation allow for continuous tracking of students while they move from school to detention center and return to school. Program being installed now.

Status: Projected

Contact: Dr. John DeWitt, Director of Grants
Escambia County School District
30 E. Texas Drive
Pensacola, FL 32503

Multiple/Various Targets

Not specified

Target: Learning Assistance Class - Primary

Description:

1. Apple IIe computer with commercial software
2. Television - Sesame Street (recorded on VHS)
3. Video camera - speech and language group
4. Tape recorders - language development and listening

Status: Current

Contact: Lorraine Wedel, Special Services Consultant
Yellowknife Education District 1
Box 788
Yellowknife, NWT X1A 2N6

Record Keeping

Early Identification of Potential Educational Discontinuers (EIPED)

Target: K-12

Description:

District Six, in cooperation with Weld County Human Resources Department, has developed a computer system, the Early Identification of Potential Educational Discontinuers (EIPED) which will be capable of identifying students from grades K-12 who have a high likelihood of discontinuing school and tracking prevention and intervention strategies implemented in the schools to address individual student needs. There are seven data categories which will provide a profile of students at risk: sex, ethnicity, family status, achievement, attendance, suspensions, and mobility. Each category will be weighted based on the Fred Holmes Student Analysis System.

A confidential report will be generated by school which will contain a listing as well as a detailed individual report, on those students who are at greatest risk of discontinuing. The EIPED system will be operable by the fall of 1987.

Status: Projected

Contact: Virginia Guzman-Fagg, Coordinator of Alternative Education Programs
Greeley School District #6
811 Fifteenth Street
Greeley, CO 80631

Elementary Guidance/Secondary Guidance

Target: All elementary and secondary school students have access to the services of a guidance counselor. The priorities of the school guidance program focus on the at risk students as they are identified by various criteria.

Description:

The guidance program in the schools uses electronic technology to document services being provided for the students at risk. The Student Case Management System (SCMS) allows administrators and providers of student services an opportunity to keep an ongoing record of some of the interventions and strategies used with the students at risk. Some of these activities include counseling, psychological evaluations, parent conferences, and community agency contacts. This system allows the retrieval of this information in order to plan for additional services or strategies.

Some of the schools have access to video equipment for broadcasting closed circuit presentations focusing on areas of concern to staff, parents, and students. These presentations can be developed at the school level or commercially purchased.

All secondary students have a computerized Career Course Plan (CCP) as part of a county on-line program. Transfer Student Information and Credit Evaluation System (TRACE) aids the students in planning for the future and establishing career goals.

Status: Current

Contact: Dr. Joyce Hickson, Supervisor, Division of Student Services
Dade County School District
1450 N.E. 2nd Avenue
Miami, FL 33132

Record Keeping

GED, State High School Diploma, and Basic Education Programs

Target: Ages 16-21

Description:

The programs' linkage through electronic technology involves our locally developed computerized curriculum instructional management system. The system has received outstanding reviews and considered by many educators as the most advanced in education today. The capabilities of the system are many and very simple to operate. The system was designed by educators and can diagnose skill weaknesses and organize the curriculum for teachers; software is coordinated with each individual skill for excellence in computer assisted instructions.

Status: Current

Contact: Dr. Carl Medlin, Director, Adult Education
Richland County School District 1
Logan School, 815 Elmwood Avenue
Columbia, SC 29201

Identifying "At Risk" Students Who Are Entering Ninth Grade

Target: Students who have completed 8th grade but have demonstrated "at risk" characteristics.

Description:

The Waterloo Community Schools will work with Dr. Kerry Hinkle to implement the use of a computer program which will use data gathered from Iowa Test of Basic Skills (ITBS), attendance and IQ scores to identify students who may have difficulty as they enter high school.

Status: Projected

Contact: William J. Orcutt, Director, Intermediate & High School Programs
Waterloo Community School District
1516 Washington Street
Waterloo, IA 50702

Record Keeping

Instructional Management System

Target: Not specified

Description:

School-based microcomputers access the district's mainframe computer and provide educators with information about student progress, performance, and instructional needs. Test scores are entered into the system and performance is compared for each objective with Minneapolis standards of mastery.

The system is currently in the process of developing a conceptual framework for organizing regular and special education objectives into skill areas and relating those skill areas to instructional materials.

Status: Current

Contact: Suzanne Grammens, IMS Coordinator
Minneapolis School District
807 NE Broadway
Minneapolis, MN 55413

Record Keeping

Not specified

Target: Chapter 1 and Remediation Assistance Program aides work with this "at risk" group. The "at risk" group served in the Kent School District are those below the 49th percentile in spelling skills on the junior high level.

Description:

One of the most interesting and unique features concerning our spelling component is its use of computers to assist the aide. We had become very concerned with the possibility that the aides were spending as much time on paperwork as they did working with students. We wanted to ensure that as much time-on-task as possible, meaning time working with students, could be maximized. Therefore, after one year's development, the following information is data-based and at the aides' fingertips:

1. student name
2. ethnic code
3. identificaiton number
4. birth year
5. parent notification date
6. actual grade placement
7. pre-test score (extrapolated to NCE gain)
8. post-test score (extrapolated to NCE gain)
9. NCE gain/loss
10. comment column

The obvious benefit is that a significant reduction in aide-hours spent on paperwork allows them more time with students.

Status: Current

Contact: Jerry Brownell, Grants Management Director
Kent School District
12033 SE 256th
Kent, WA 98031

Not specified

Target: Pre-School Kindergarten

Description:

A pre-school screening program. Students are screened by 13 subtests. The results feed into a computer. Identification of students requiring special attention.

Status: Current

Contact: Mr. Lawrence Sipe, Program Coordinator Special Services
Box 970
Port Aux Basques, NF

Record Keeping

Not specified

Target: High school students who exhibit chronic truancy and have failed courses during the previous semester.

Description:

The Comprehensive Competencies Program delivers individualized, competency-based instruction using a computer system to automate test-scoring, lesson assignments, recordkeeping and reporting, analysis, management, and networking. After analysis of mastery tests, each learner is assigned to instruction of appropriate difficulty in those subject areas which have not been mastered. For every learning objective, lesson assignments reference an array of print, audiovisual, and computer-based learning materials identified through a review of commerical and public sector courseware. Educational achievement is linked to employment opportunity.

Status: Current

Contact: Irwin Kaufman, Director
New York City Public School District
131 Livingston Street, Room 200
Brooklyn, NY 11201

Project ot Prevent School Dropouts*

Target: All students in secondary I (grade 8) and in secondary III (grade 10).

Description:

All students in these grades complete a specially designed questionnaire. The data are entered into a computer using PAS software and the results identify potential dropouts.

* All information translated from original French.

Status: Current

Contact: Michelin Lavoie, Conseiller Pedagogique
C.S.R. Meilleur
142 Rue Dufferin, C.P. 9000
Granby, PQ J2G 9H7

Record Keeping

Project S.T.A.Y.

Target: Students aged 16-20 who are dropouts, adjudicated delinquent, parents, or who have excessive absences, and who are one or more years behind in basic skills (math, reading, language arts) or credits.

Description:

There are four components to Project S.T.A.Y.: basic skills remediation, a job preparation class, vocational skills training, and tryout employment.

Project S.T.A.Y. uses Apple IIe computers to:

1. generate assignments
2. correct tests
3. keep track of progress
4. maintain records
5. for individualized instruction

Our facility has 20 computer work stations and 20 non-computer stations.

We use videotapes to illustrate certain job skills (such as correct interviewing techniques). We also have two specially adapted computers which are used to assess vocational skills and aptitudes.

Status: Current

Contact: Dr. Gary Finch, Administrator
Milwaukee School District #5
820 East Knapp Street
Milwaukee, WI 53202

Special Education

Augmentative Communication Enhancement

Target: Early Childhood and Primary Special Education students - esp. speech and/or hearing impaired.

Description:

Using switches, communication boards, and adaptive devices along with computers and speech synthesizers, we are giving heretofore speechless children a "voice" and a means to communicate, learn skills, and produce printed outputs. We plan to continue and extend this program next year to make all these devices a larger part of each child's school day and life.

Status: Current

Contact: Joy Zabala or Nancy Kimbrough, Teacher/Lab Director - Assistant Director
Brazosview/Brazosport Independent School District
P.O. Drawer Z
Freeport, TX 77541

Computer Literacy/Special Ed.

Target: Intermediate Cluster (ages 10 to 16) Learning Disabled, Emotionally Disturbed, Mentally Retarded, Multiple Handicapped, Speech Impaired, etc.

Description:

These students come to computer lab in groups of 8 to 12 for 50 minutes each day. Each student's program is individualized to include activities at his/her skill level. We use productive software (Printshop, word processors, Certificate Maker, etc.) to create products these students never dreamed they could make. We also do keyboarding activiites and many of the students are doing really well on their typing skills. I work closely with the other teachers in our building to provide drill and practice, allow students to do writing assignments, etc. As 3-year reviews are done, we will be matching software to suggestions for improvement of critical skills which are given to teachers by the diagnostician at our building.

Status: Current and Projected

Contact: Reta Angell or Nancy Kimbrough, Teacher/Lab Director/Assistant Director
Brazosview/Brazosport Independent School District
P.O. Drawer Z
Freeport, TX 77541

Special Education

Developing Typing Skills in Handicapped Students

Target: One or more years behind grade level in reading or mathematics skills, grades 3 and 4.

Description:

Our typing program developed out of a need. A third grader with cerebral palsy was having a very difficult time handling the task of writing. While the rest of the class was having handwriting practice, the third grader learned touch typing through the use of an Apple IIe and a typing software program. As a fourth grader, the student uses a word processing program to type writing assignments. The access to the computer is highly motivational and minimizes the student's handicap.

Status: Current

Contact: Karen Widmer, Interim Language Arts Coordinator
Stroudsburg Area School District
1100 West Main Street
Stroudsburg, PA 18360

Extended Skills Development Centre
Secondary Teaching and Evaluation Centre

Target: Severe learning disabled adolescents.

Description:

Using the computer as a tool for writing, organizing and problem solving is an important component of these support programs for learning disabled students. Use of keyboarding, word processings, and data base programs to assist students with curriculum demands is stressed.

Status: Current

Contact: Shirley Cazalet, Project Manager - Computers in Special Education
Vancouver School Board
1595 West 10th Avenue
Vancouver, BC V6J 1Z8

Special Education

G.F. Strong School

Target: Physically disabled - limited language proficiency.

Description:

Provincial Education Assessment Centre - we serve physically disabled students from throughout the province who present unique or complex problems to their home schools. The students spend up to six weeks in our Centre. Many of the adolescents we see would fit into the "at risk" category due to speech impairment. Many of the services we use with students are protable communication systems such as VOIS 135, Light Talker, Touch Talker, Epson Speech Pak. Some other devices are stand-alone, and require a microcomputer with speech synthesizer. Many adaptations are also used which can help the physically disabled person access the keyboard.

Status: Current

Contact: Mike Bartlett, Head Teacher
G.F. Strong Rehabilitation Centre
4255 Laurel Street
Vancouver, BC V6J 1Z8

Learning Disabilities Class

Target: Senior elementary learning disabled students.

Description:

Computers:

Programs stressing cues/strategies for effective/efficient reading

Revision of written work (word processor)

Communication (written)-use of modem

Logical Thinking-Problem solving programs

Following Directions

Status: Current

Contact: John Chisholm, Teacher of Learning Disabled Students
95 Victoria Road
Dartmouth, NS B3A 1V2

Special Education

Learning Disabilities Class

Target: Senior elementary learning disabled students.

Description:

Reading strategies and cues - computer programs demanding prediction skills.

Writing skills - word processor for revision
- communication with learning disabled students in another school through electronic bulletin board (modem).

Reinforcement of basic math skills (computer drill programs).

Logical Thinking and Visual-Spatial Awareness computer programs.

Status: Current

Contact: Gail Collins, Teacher of Learning Disabled Students
95 Victoria Road
Dartmouth, NS B3A 1V2

Not specified

Target: 1. Special education resource teacher - pull-out program

2. Regular classroom, grades 1-6

Description:

1. Apple IIe software used for motivational and for practice purposes-especially math application, for students with identified learning handicaps.

2. Instructional television and videocassettes used to provide preview and/or background information in literature, social studies, science, etc., which especially help students with an ethnic, economic or cultural disadvantage-or who possesses limited proficiency in English.

Status: Current

Contact: Gloria Watts, Administrator
Fresno Unified School District
Curriculum & Instructional Services
Tulare & M Streets
Fresno, CA 93721

Special Education

Not specified

Target: Physically handicapped, ages 5-12

Description:

Introductory stimulus-response for low functioning students. Program is "Pik-a-pek" from Grand Rapids, Ontario. Second program is "Clown": eye-hand coordination and body image.

Status: Current

Contact: Jackie Warlow, Classroom Teacher
95 Victoria Road
Dartmouth, NS B3A 1V2

Special Needs

Target: High School -- Learning Disabled, Behavior/Attitude Problems

Description:

Most of the students in the Resource Program have experienced learning difficulties during their school career. Their high school success is threatended by past failure, subsequent negative attitude, and continued weaknesses in academic areas.

In the Resource Program the use of a personal computer and video equipment enhances a student's learning. The student learns the basic operation of the computer and the available software. It is a tool to be used. Word processing skills are developed, typing and math skills are practiced, problem-solving skills and creativity are challenged as a student develops his own program. Basic skills are reinforced using a drill and practice program. Written language skills improve as a student becomes familiar with the use of word processing programs. All these skills improve with the use of the computer on daily basis.

Curriculum in social studies and English is greatly enhanced by the use of a VCR in the classroom. Geography, cultures, time and space concepts are more easily perceived using the visual presentation. Concepts are more easily grasped. The language of books and short stories are given clearer meaning with the use of the VCR. It reinforces other learning.

Status: Current

Contact: Jeanne Ivas, Resource Teacher
Hull Public School District
Hull High School
180 Main Street
Hull, MA 02045

Special Education

Special Needs Self-Contained Class

Target: Emotionally/Behaviorally Disturbed-Grades 9-12.

Description:

The program services students who have a history of poor attendance, acting inappropriately in class, not completing in-class or homework asssignments, and negative responses to authority figures. The program provides students with the ooportunity for small group or one-to-one instruction in all academic areas as well as helping them deal more appropriately with authority figures, helping to improve their organizational skills, and helping them to create better self-images. The computer is used primarily as a tool for providing positive reinforcement activities for those skills presented in class, as a word processor for student compositions and papers, and as a reward for those students who complete their work early. The computer has been a useful and effective tool to have in my classroom.

Status: Current

Contact: Robert M. Carroll, Special Needs Teacher
Winchester School District
Winchester High School
80 Skillings Road
Winchester, MA 01890

Talking Screen Textwriting Program Software

Target: K-8: 1 or more years behind grade level in Reading/Writing skills

K-12: Usually Handicapped

Description:

This is a word processing package which provides auditory feedback (ie., everything that a student has written is read back to him/her exactly as written).

Status: Projected

Contact: Bev Wilson, Learning Center Consultant
770 St. Mary's Rd.
Winnipeg, MB R2M3N7

Special Education

The Kent County Secondary Intensive Learning Center

Target: The target population includes students between the ages of 14 and 20 who have failed or are at risk of failure due to a number of variables, and who needs a more restrictive and intensive education program.

Description:

This level 5 Intensive Learning Center Program was founded to meet the need of unserved and underserved secondary aged students with severe learning and/or emotional-behavior problems. There are 3 important components of this program: There is a strong emphasis on academic preparation which includes the use of computers, concentrated emphasis on counseling, and vocational preparation of the student.

The Intensive Learning Center has contracted with DIRECT (Delaware Insturctional Resources for Education through Computer Technology.) The program provides computer assisted instruction in major curriculum areas that is suitable for special education drill and practice and includes components of diagnostic work-ups and record keeping. Each contract includes 500 blocks (256K bytes) of disk storage on the VAX computer of 30 students numbers on the DATA General Computer. Programs include the following:

Basic Reading
Reading
Reading for Comprehension
Language Arts
Math
Problem Solving
Survival Skills
Games
Similations

Status: Current

Contact: Dianne G. Sole, Coordinator/Psychologist
Kent County Voc-Tech School District
P.O. Box 97
Woodside, DE 19980

Vocational

Auto Shop

Target: Continuation high school students (ages 16-19)

Description:

Through the use of state-of-the-art technology, students have the opportunity to prepare to take the certification test to become an Auto Emissions Technician. The use of two and four gas analyzers and computer-controlled oscilloscopes provides an instructional setting which closely approximates a work environment.

Status: Current

Contact: Charles W. Norton, Principal
Montebello Unified School District
1230 South Vail Avenue
Montebello, CA 90640

Career Information System and Enhancing Self-Concept

Target: Grades 7-12: Pregnant teens; chronic truants; physically, sexually, and/or emotionally abused; potential dropouts; adjudicated delinquents; family crises; disadvantaged.

Description:

User friendly and easily accessed computer software programs are used by students. These include:

"Who Am I?" software package used with students "at risk" on an individual basis to provide an opportunity to look at self, values, and stress factors in the environment. On-going counseling included.

"Career Search" follow up of "Who Am I?" Short, personal assessment package. Assists student to identify interests. Counselor assistance follows to help student redirect career goals.

"Discover Program" a career information system. Assists student to define goals, survey options and opportunities, and make decisions about careers.

"Reading and Learning Style Inventory" used with selected groups of students who are "at risk" of failure. Software is primarily designed to provide teachers with information about individual student needs.

"TIPS For Successful Employment and Living" addresses specific areas necessary in developing employability skills.

"Job-O" a general career interest survey that forces the student to go through a brief self-assessment. Responses are tabulated and correlated with jobs whose characteristics most closely match student's answer. Information about selected career is also available.

"Careers 2000" gives access to information on over 560 careers. Provides descriptive outlines on individual career duties, working conditions, entry requirements and training needed, earnings, etc.

Videocassette programs. Several commercially-produced programs are excellent resources for group counseling of "at risk" students who are dealing with family crises including physical, sexual, and/or emotional abuse. Examples of such programs are "Something About Amelia," "For Kids Sake," "After School Programs," and certain documentaries.

Status: Current

Contact: Martha Rader, Supervisor of Guidance
Roanoke City School District
40 Douglass Avenue, NW
Roanoke, VA 24012

Vocational

Comprehensive Competencies Program (CCP) Lab

Target: High School and Middle School

Description:

The High School students attend a Comprehensive Competencies Program (CCP) Lab designed by Remediation and Training Institute, Washington D.C. They are in the CCP Lab three periods and in an Occupational Vocational Program three periods per day. The program is two years in duration with a goal of preparing the student to take the GED upon completion and to have an entry level employment skill.

We have programs at four sites and recommending a fifth site.

The instructional materials will be varied using the CCP guides and materials as the basis for the basic academic skills development. The equipment will include microcomputers, videocassette recorder/player systems, filmstrips and slides with sound/cassette and built-in projection, and record players. The equipment will be used in the basic academic skills cluster and for career guidance purposes as well.

Status: Current

Contact: Lewis D. Griner, Coordinator of Vocational Programs
Savannah-Chatham County School District
208 Bull Street
Savannah, GA 31401

Coordinated Vocational Academic Education

Target: Economically and Academically Disadvantaged Students, Ninth grade, Ages 14-17.

Description:

Coordinated Vocational Academic Education (CVAE) -- Students have been allowed to use the two computers during class, lunch, before school and at other times. Students work on remedial skills in math, vocabulary, reading, speed reading, grammar. Several are learning to use the word processor for writing class reports. The graphics editor was used for a special science project. A number of students have been learning Basic and writing their own programs -- this has been taught by students (CVAE). Remediation in the vocational areas such as electronics (math) and reading the ruler, job skills, using measuring tools has been very successful.

Use of the computer has taught the students to work with their peers, to read directions and follow them, to take responsibility for care and use of equipment and materials. The computer is the most successful teaching method I have used in 20 years of teaching.

Status: Current and Projected

Contact: Marian C. Bush, CVAE Coordinator
Baldwin County School District
Boddie Junior High School
Milledgeville, GA 31061

Vocational

Drafting/Industrial Technology

Target: Grades nine and ten disaffective students (students who because of behavioral patterns cannot function affectively in a comprehensive setting).

Description:

The program at the Alternative High School will provide a comprehensive program for disaffective students. Since over forty percent of our high school students drop out by the twelfth grade, the program emphasized interest in career-oriented programs, designed to motivate student interest. The improvement of the school environment, with high interest areas such as career orientation and vocational training, may result in reconstruction of self-image and successful experiences in school. This environment often leads to a reduction in disruptive behaviors.

The program is designed to introduce students in an alternative high school to careers and advances in high technology situations. Activities will include making working drawings on computerized drafting equipment, and programming of computerized robotic arm to perform desired manipualtions as they would be related to industrial occupations.

Status: Projected

Contact: Mr. Kevin Price, Teacher of Industrial Arts
Newark School District
Alternative High School
301 West Kinney Street
Newark, NJ 07103

Duncan Polytechnical High School

Target: All of the students at Duncan Polytechnical High are "At Risk". This involves an age group of 14 to approximately 62 years of age.

Description:

All of the classes at Duncan are computer assisted. This includes the academic and vocational offerings. Particular classes with heavy computer involvement are Retail Sales, Small Business Management, Salesmanship, Computer Literacy, Microcomputer Accounting, Accounting I, Advanced Typing/Word Processing, Word Processing, Banking and Finance, Medical Transcriptionist, Electronic Office, Graphics, Vocational Electronics, Resource Program, Public Speaking, English I, English II, English III, English IV, Biology, Medical Lab Assistant, Medical Assistant, Vocational Computer Lab. Instructional television and videocassettes are used in every class on the campus. Interactive video disks are used in Biology and CD/ROM is used in the Library as all of our reference books are interactive disk. We have Apple, IBM, Burroughs, and Apple compatible labs. Our inventory of electronic equipment, especially that type of equipment which is on the leading edge of the technology is quite large.

Status: Current

Contact: Gloria Watts, Administrator
Fresno Unified School District
Curriculum & Instructional Services
Tulare & M Streets
Fresno, CA 93721

Vocational

Employment Orientation

Target: Ninth grade Title I students

Description:

Employment Orientation provides students identified as educationally disadvantaged and potential dropouts with an opportunity to develop workplace responsibility, ability to function as a member of society, upgrading of basic reading and math skills, and entry-level job skills. The program emphasizes work attitudes, safety habits, and knowledge of related career education information.

Students use the Computer Aided Drafting system to perform basic steps in developing and plotting drawings. A compatible program enables them to design and test automobiles.

The Computer Numeral Control equipment has taught students to load, save, recall, and interpret sample programs.

The use of typesetting equipment (Compt. Edit. 6400) has taught students to load master programs and typefaces, set jobs, and retrieve them from a disc.

Students use IBM PC Jrs. to develop computer literacy and to work with tutorial programs in typing and word processing.

Status: Current

Contact: Arthur Scavone, Department Chairperson
Newark School District
Barringer Preparatory School
63 Webster Street
Newark, NJ 07104

Job Training Partnership Act

Target: Economically disadvantaged junior and senior high students identified by principals, teachers, and counselors

Description:

A teacher works one-on-one with identified students in such areas as interview skills, work experience, maturity skills, and job skills. Computers are used to develop a personality profile or practice interview skills.

Status: Current

Contact: Pam McClure, JTPA Coordinator
Kanawha County School District
1201 Washington Street E.
Charleston High School
Charleston, WV 25311

Vocational

Not specified

Target: High-school age single parents

Description:

Students at the high school receive information through the Career Center about careers and/or take interest inventories through computer software, such as "Choices" or the "CASE Inventory." A series of videocassettes focuses on career preparation, such as writing resumes and preparing for the job interview. Software emphasizing basic skills in reading, math, and writing are also provided to these students.

Status: Current

Contact: Charlotte Kennedy, Work Experience Coordinator
Jurupa Unified School District
3924 Riverview Drive
Riverside, CA 92509

Not specified

Target: Ages 16-20

Description:

Students in Ohio wanting to attend the Joint Vocational Schools during their junior and senior years of high school to learn job skills are required to pass certain academic credits first. Many lack these. It is proposed that some of these courses be made available on instructional television. Such a program might also provide enrichment for accelerated students.

Status: Suggested

Contact: James L. Deeter, Pupil Personnel Supervisor
Montgomery County Joint Vocational School District
Joint Vocational School
6800 Hoke Road
Clayton, OH 45315-9740

Vocational

Not specified

Target: High School Students in grades 9-12

Description:

We have expanded our computer offerings, which were originally academically oriented only. We now have a course for the "general" or slower student, with the goal of increasing employability in the work place. This course in Practical Computing empahsizes learning to be comfortable with the computer, learning word processing, learning some aspects of a Data Base and Spreadsheet, and learning to operate some software.

Status: Current

Contact: Curtis Wilson, Principal
Scott County School District 2
Scottsburg High School
500 South Gardner
Scottsburg, IN 47170

Not specified

Target: High School; Ages 14-19

Description:

High school tutorial - a program for high schools dropouts, teenage mothers and other "at risk" students. Use of "CHOICES" computer guidance program

Status: Current

Contact: B. Noonan, Superintendent
Saskatoon Catholic School
420-22 St. E.
Saskatoon, SK S7K 1X3

Vocational

Small Business Academy

Target: Returning high school students, predominantly age 16-21.

Description:

The Small Business Academy is a high school diploma, career preparation program funded by the Kern High School District with a one year grant from the National Education Association/Operation rescue. The Academy will begin fall 1987 to serve 100 students in basic skills and career development on a continuum from small business awareness to entrepreneurship.

Extensive use will be made of computers to achieve basic skill proficiency (reading, writing, math), course supplementation (algebra, government) and program enrichment (business math, accounting, computer literacy). Students will learn to use computer tools appropriate for small business employment and management (word processing, database, spreadsheet).

Status: Projected

Contact: Kimberly M. Logan, Supervisor, Retention/Recovery
Kern High School District
2000-24th Street
Bakersfield, CA 93301

Special Needs Vocational Education

Target: Grades 9-12

Description:

This is a Pre-Vocational program which includes clusters of Service Occupations, Construction and Mechanical. Basic Skills remediation is a vital part of the program. Currently we are using as IBM PC with the following programs:

1. Pre-Vocational Math Review
2. Shop Math Basic Skill
3. Shop Math Building Trades
4. Shop Math Electrical Trades
5. Developing Shop Safety
6. Micro Test
7. Construction Basic Principals

Status: Current

Contact: Robert Lykens, Administrative Assistant
Kent County Voc-Tech School District
P.O. Box 97
Woodside, DE 19980

Vocational

Supervised Alternative Learning for Excused Pupils (SALEP) Life Skills Program

Target: Students in this group are under the age of 16 and have applied for and been granted leave from regular shcool attendance.

Description:

The purpose of the program is to prepare students to enter the work force or counsel them to return to school. A computer is used to make the students aware of a variety of career fields and related jobs (CHOICES from CSG). Students also use a computer to develop a resume; in some cases, students prefer to answer some questionaires by keying in their answers on the computer rather than interacting directly with the group or teacher. Video Tapes related to like skills, job search skills are also used.

Status: Current

Contact: Cec Patriquin, Life Skills Teacher/Counsellor
Peel Board of Education, H.J.A. Brown Education Center
5650 Hurontario Street
Mississauga, ON L5R 1C6

Video Technology as a Support to Instruction

Target: Henrico Trade Center is an alternative school which serves students possessing one or more of the "at-risk" factors listed in the cover letter.

Description:

Throughout the school year, various programs are video-taped for the purpose of facilitating the goals and objectives of the students. These programs promote not only social awareness, but enhance group discussion, as well. Sources for these programs include After-School Specials, talk shows, and movies. These programs are carefully reviewed by staff members to determine the relevancy to instructional programming.

Employment interviews are an integral facet of the Industrial Work Experience classes taught here at Henrico Trade Center. Video technology is used for assessing a student's skills during job interviews and presenting various job interview techniques. As these video tapes are viewed by the student(s), the educator reviews the strengths and weaknesses. This again promotes discussion and facilitates learning.

Status: Current

Contact: Nathan Matthews, Principal
2204 Mountain Road
Glen Allen, VA 23060

Appendix

Agency for Instructional Technology
Programming for Today's Learner

Board of Directors

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George B. Buchholz
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of Education

Charlie G. Williams
South Carolina Superintendent
of Education

Linus Wright
Dallas Independent School District
General Superintendent

March 20, 1987

Dear Administrator:

We need your help in determining the uses of electronic technology in school programs or activities serving students at risk of school failure.

Video and computer technologies hold great potential for serving these students, about whose education there is widespread concern. But information about the uses schools are making of these technologies is scarce. Accordingly, the National School Boards Association's Institute for the Transfer of Technology to Education and the Canadian Education Association have joined with the Agency for Instructional Technology to conduct the survey described in the enclosures.

The results of the survey will provide important background for a major American-Canadian conference scheduled for June 28-30, 1987, to consider promising ways in which computer and video technology can assist schools in better serving students at risk. Survey results and reports of the conference proceedings will be sent to those participating in this survey.

Your assistance in this effort is vital. Please help us by having the enclosed survey forms completed by a staff member who is responsible for planning and programming for "at-risk" students. The survey forms should be returned by April 10, 1987.

Thank you for your help.

Sincerely,

Edwin G. Cohen
Executive Director

Enclosures

Box A, Bloomington, Indiana 47402-0120 / 812-339-2203 or 800-457-4509

Memorandum

To: "At-Risk" Programs/Activities Supervisor

From: Edwin G. Cohen, Executive Director, AIT

Subject: Survey of Programs/Activities Using Electronic Technology to Serve Students at Risk of School Failure

March 20, 1987

We need your help in determining the uses of electronic technology in school programs or activities serving students at risk of school failure.

Video and computer technologies hold great potential for serving these students, about whose education there is widespread concern. But information about the uses schools are making of these technologies is scarce. Accordingly, the National School Boards Association's Institute for the Transfer of Technology to Education and the Canadian Education Association have joined with the Agency for Instructional Technology to conduct this survey.

The results of the survey will provide important background for a major American-Canadian conference scheduled for June 28-30, 1987, to consider promising ways in which computer and video technology can help schools better serve students at risk. Survey results and reports of the conference proceedings will be sent to those participating in this survey.

For the purpose of this survey, "students at risk" means dropouts and other pupils (K-12) whose school achievement, progress toward graduation, or preparation for employment are in serious jeopardy because of one or more of the following factors. The factors are:

* one or more years behind grade level in reading or mathematics skills (K-8)
* three or more credits behind age/grade level in credits toward graduation (9-12)
* chronic truancy
* school age parenthood
* adjudicated delinquency
* personal and/or family alcohol or drug abuse
* family trauma such as death, divorce, violence, separation, or unemployment
* physical, sexual, or emotional abuse
* limited English proficiency
* ethnic, economic, or cultural disadvantage

For the purpose of this survey, "electronic technology" means instructional television, videocassette programs, computer software, or videodiscs which are used as teaching or learning resources, as programs for individualized instruction, or as learning motivators.

-over-

Agency for Instructional Technology, Box A, Bloomington, Indiana 47402-0120 / 812-339-2203 or 800-457-4509

Survey

Program/Activity Using Technology to Serve Students at Risk of School Failure

Name of Program/Activity:

Status: _____Current _____Projected _____Suggested

"At-Risk" Group Served: (category and/or age group)

Program/Activity Description: (Please include the role of electronic technology.)

For more information, contact:

Name: _____

Title: _____

Address: _____

_____ Phone _____

Please return this questionnaire by April 10, 1987, to the address below.

Agency for Instructional Technology, Box A, Bloomington, Indiana 47402-0120 / 812-339-2203 or 800-457-4509

Evolving from a television library begun in 1962, the nonprofit American-Canadian Agency for Instructional Technology (AIT) was established in 1973 to strengthen education through technology. AIT pursues its mission through the development and distribution of video and computer programs and printed materials in association with state and provincial education agencies. In addition, AIT acquires, enhances, and distributes programs produced by others. AIT programs are used in schools throughout the United States and Canada. The agency is based in Bloomington, Indiana.

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